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PTO/SB/21 (02-04)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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TRANSMITTAL FORM (to be used for all correspondence after initial filing)	Application Number	09/739,940 ; Pat. No. 6,794,196 <i>P2</i>
	Filing Date	December 19, 2000 ; Issued: 9/21/04
	First Named Inventor	Stephen J. Fonash
	Art Unit	1639
	Examiner Name	My Chau T. Tran
Total Number of Pages in This Submission	Attorney Docket Number	30626-101

ENCLOSURES (Check all that apply)		
<input checked="" type="checkbox"/> Fee Transmittal Form	<input type="checkbox"/> Drawing(s)	<input type="checkbox"/> After Allowance communication to Technology Center (TC)
<input checked="" type="checkbox"/> Fee Attached	<input type="checkbox"/> Licensing-related Papers	<input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences
<input type="checkbox"/> Amendment/Reply	<input type="checkbox"/> Petition	<input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief)
<input type="checkbox"/> After Final	<input type="checkbox"/> Petition to Convert to a Provisional Application	<input type="checkbox"/> Proprietary Information
<input type="checkbox"/> Affidavits/declaration(s)	<input type="checkbox"/> Power of Attorney, Revocation	<input type="checkbox"/> Status Letter
<input type="checkbox"/> Extension of Time Request	<input type="checkbox"/> Change of Correspondence Address	<input checked="" type="checkbox"/> Other Enclosure(s) (please identify below):
<input type="checkbox"/> Express Abandonment Request	<input type="checkbox"/> Terminal Disclaimer	Request for a Certificate of Correction Under 37 CFR 1.323; Form PTO/SB/44; return postcard.
<input type="checkbox"/> Information Disclosure Statement	<input type="checkbox"/> Request for Refund	
<input type="checkbox"/> Certified Copy of Priority Document(s)	<input type="checkbox"/> CD, Number of CD(s) _____	
<input type="checkbox"/> Response to Missing Parts/Incomplete Application	Remarks	
<input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53		

Certificate
NOV 05 2004
of Correction

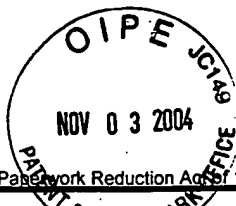
SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT	
Firm or Individual name	Peter J. Borghetti, Reg. No. 42,345
Signature	
Date	October 29, 2004

CERTIFICATE OF TRANSMISSION/MAILING	
I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below. Attn: Certificate of Correction Branch	
Typed or printed name	Peter J. Borghetti
Signature	
Date	October 29, 2004

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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PTO/SB/17 (10-04)

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FEE TRANSMITTAL for FY 2005

Effective 10/01/2004. Patent fees are subject to annual revision.

☒ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$) 100.00

Complete if Known

Application Number	09/739,940; Pat No. 6,794,196
Filing Date	December 19, 2000; Issued 9/21/04
First Named Inventor	Stephen J. Fonash
Examiner Name	My-Chau T. Tran
Art Unit	1639
Attorney Docket No.	30626-101

METHOD OF PAYMENT (check all that apply)☒ Check ☐ Credit card ☐ Money Order ☐ Other ☐ None☒ Deposit Account: (deficiencies only)Deposit
Account
Number
Deposit
Account
Name

03-2410 (Order 30626-101)

Perkins Smith & Cohen LLP

The Director is authorized to: (check all that apply)

☐ Charge fee(s) indicated below ☐ Credit any overpayments☒ Charge any additional fee(s) or any underpayment of fee(s)☐ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.**FEE CALCULATION****1. BASIC FILING FEE**

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid
1001 790	2001 395	Utility filing fee	
1002 350	2002 175	Design filing fee	
1003 550	2003 275	Plant filing fee	
1004 790	2004 395	Reissue filing fee	
1005 160	2005 80	Provisional filing fee	
SUBTOTAL (1)			(\$) 0

2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

	Extra Claims	Fee from below	Fee Paid
Total Claims	-20** =	X	
Independent Claims	-3** =	X	
Multiple Dependent			

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description
1202 18	2202 9	Claims in excess of 20
1201 88	2201 44	Independent claims in excess of 3
1203 300	2203 150	Multiple dependent claim, if not paid
1204 88	2204 44	** Reissue independent claims over original patent
1205 18	2205 9	** Reissue claims in excess of 20 and over original patent

SUBTOTAL (2) (\$) 0

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FEE CALCULATION (continued)**3. ADDITIONAL FEES**

Large Entity Small Entity

Fee Code (\$)	Fee Code (\$)	Fee Description	Fee Paid
1051 130	2051 65	Surcharge - late filing fee or oath	
1052 50	2052 25	Surcharge - late provisional filing fee or cover sheet	
1053 130	1053 130	Non-English specification	
1812 2,520	1812 2,520	For filing a request for ex parte reexamination	
1804 920*	1804 920*	Requesting publication of SIR prior to Examiner action	
1805 1,840*	1805 1,840*	Requesting publication of SIR after Examiner action	
1251 110	2251 55	Extension for reply within first month	
1252 430	2252 215	Extension for reply within second month	
1253 980	2253 490	Extension for reply within third month	
1254 1,530	2254 765	Extension for reply within fourth month	
1255 2,080	2255 1,040	Extension for reply within fifth month	
1401 340	2401 170	Notice of Appeal	
1402 340	2402 170	Filing a brief in support of an appeal	
1403 300	2403 150	Request for oral hearing	
1451 1,510	1451 1,510	Petition to institute a public use proceeding	
1452 110	2452 55	Petition to revive - unavoidable	
1453 1,330	2453 665	Petition to revive - unintentional	
1501 1,370	2501 685	Utility issue fee (or reissue)	
1502 490	2502 245	Design issue fee	
1503 660	2503 330	Plant issue fee	
1460 130	1460 130	Petitions to the Commissioner	
1807 50	1807 50	Processing fee under 37 CFR 1.17(q)	
1806 180	1806 180	Submission of Information Disclosure Stmt	
8021 40	8021 40	Recording each patent assignment per property (times number of properties)	
1809 790	2809 395	Filing a submission after final rejection (37 CFR 1.129(a))	
1810 790	2810 395	For each additional invention to be examined (37 CFR 1.129(b))	
1801 790	2801 395	Request for Continued Examination (RCE)	
1802 900	1802 900	Request for expedited examination of a design application	

Other fee (specify) Request Cert of Correction 100.00

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SUBTOTAL (3) (\$) 100.00**SUBMITTED BY**

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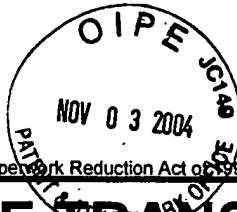
Name (Print/Type)	Peter J. Borghetti	Registration No. (Attorney/Agent)	42,345	Telephone	617-854-4000
Signature		Date	October 29, 2004		

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FEE TRANSMITTAL for FY 2005

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☒ Applicant claims small entity status. See 37 CFR 1.27

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Complete if Known

Application Number	09/739,940; Pat No. 6,794,196
Filing Date	December 19, 2000; Issued 8/21/04
First Named Inventor	Stephen J. Fonash
Examiner Name	My-Chau T. Tran
Art Unit	1639
Attorney Docket No.	30626-101

METHOD OF PAYMENT (check all that apply)

☒ Check ☐ Credit card ☐ Money Order ☐ Other ☐ None

☒ Deposit Account: (deficiencies only)

Deposit Account Number
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03-2410 (Order 30626-101)

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FEE CALCULATION

1. BASIC FILING FEE

Large Entity		Small Entity		Fee Description	Fee Paid
Fee Code	Fee (\$)	Fee Code	Fee (\$)		
1001	790	2001	395	Utility filing fee	
1002	350	2002	175	Design filing fee	
1003	550	2003	275	Plant filing fee	
1004	790	2004	395	Reissue filing fee	
1005	160	2005	80	Provisional filing fee	
SUBTOTAL (1)					(\$) 0

2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

Total Claims		Extra Claims		Fee from below		Fee Paid
Independent Claims	Multiple Dependent	- 20** =	- 3** =	X	X	

Large Entity		Small Entity		Fee Description
Fee Code	Fee (\$)	Fee Code	Fee (\$)	
1202	18	2202	9	Claims in excess of 20
1201	88	2201	44	Independent claims in excess of 3
1203	300	2203	150	Multiple dependent claim, if not paid
1204	88	2204	44	** Reissue independent claims over original patent
1205	18	2205	9	** Reissue claims in excess of 20 and over original patent

SUBTOTAL (2) (\$) 0

**or number previously paid, if greater; For Reissues, see above

FEE CALCULATION (continued)

3. ADDITIONAL FEES

Large Entity Small Entity

Fee Code	Fee (\$)	Fee Code	Fee (\$)	Fee Description	Fee Paid
1051	130	2051	65	Surcharge - late filing fee or oath	
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1053	130	1053	130	Non-English specification	
1812	2,520	1812	2,520	For filing a request for ex parte reexamination	
1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action	
1805	1,840*	1805	1,840*	Requesting publication of SIR after Examiner action	
1251	110	2251	55	Extension for reply within first month	
1252	430	2252	215	Extension for reply within second month	
1253	980	2253	490	Extension for reply within third month	
1254	1,530	2254	765	Extension for reply within fourth month	
1255	2,080	2255	1,040	Extension for reply within fifth month	
1401	340	2401	170	Notice of Appeal	
1402	340	2402	170	Filing a brief in support of an appeal	
1403	300	2403	150	Request for oral hearing	
1451	1,510	1451	1,510	Petition to institute a public use proceeding	
1452	110	2452	55	Petition to revive - unavoidable	
1453	1,330	2453	665	Petition to revive - unintentional	
1501	1,370	2501	685	Utility issue fee (or reissue)	
1502	490	2502	245	Design issue fee	
1503	660	2503	330	Plant issue fee	
1460	130	1460	130	Petitions to the Commissioner	
1807	50	1807	50	Processing fee under 37 CFR 1.17(q)	
1806	180	1806	180	Submission of Information Disclosure Stmt	
8021	40	8021	40	Recording each patent assignment per property (times number of properties)	
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1801	790	2801	395	Request for Continued Examination (RCE)	
1802	900	1802	900	Request for expedited examination of a design application	

Other fee (specify) Request Cert of Correction 100.00

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SUBTOTAL (3) (\$) 100.00

SUBMITTED BY

Name (Print/Type)

Peter J. Borghetti

Registration No.
(Attorney/Agent)

42,345

Telephone 617-854-4000

Signature

Date

October 29, 2004

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Peter J. Borghetti
Reg. No. 42,345

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants	:Stephen J. Fonash et al.	Attorney Docket: 30626-101
Patent No	:6,794,196	Group Art Unit: 1639
Issued	:September 21, 2004	Examiner: My-Chau T. Tran
Serial No.	:09/739,940	
Filed	:December 19, 2000	
For	:DEPOSITED THIN FILMS AND THEIR USE IN DETECTION, ATTACHMENT AND BIO-MEDICAL APPLICATIONS	
Customer No.:	26486	

PERKINS, SMITH & COHEN, LLP
One Beacon Street
Boston, MA 02108
(617) 854-4000

TO: Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450
Attn: Certificate of Correction Branch

REQUEST FOR A CERTIFICATE OF CORRECTION UNDER 37 CFR 1.323

11/04/2004 MGE BREM1 00000017 6794196

01 FC:181 Sir:

100.00 OP

In the matter of U.S. Patent No. 6,794,196 B2 issued September 21, 2004, a check of the same against the files of the attorney of record indicates that two mistakes described in

NOV 10 2004 1/4

the attached Form PTO 44 were made by the Office and one mistake described in the attached Form PTO 44 was made by Applicants in good faith.

More specifically, the following mistakes, corrected in Form PTO 44 were made by the Office and are of a clerical nature:

Claim 1, line 3 (column 26, line 61), "and species adsorption" should read --and adsorption--.

The corrected 22 sheets of substitute drawings (Figures 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14a, 14b, 15, 16, 17, 18a, 18b 19a, 19b, 20, 21 and 22) requested by the Examiner and Draftsperson and submitted by Applicants on July 15, 2002 were not published in the patent.

Additionally, the following mistake, corrected in Form PTO 44, was made by Applicants and is of a typographical nature, the mistake having occurred in good faith:

Claim 5, line 4 (column 27, line 23), "species absorption" should read --species adsorption--.

REMARKS

Under 35 U.S.C. 254, whenever a mistake in a patent, incurred through fault of the Patent and Trademark Office, is clearly disclosed by the records of the Office, the Director may issue a certificate of correction stating the fact and nature of such mistake, under seal, without charge.

In the Notice of Allowance mailed May 13, 2004, which included an Examiner's Amendment approved in a telephone interview with Orlando Lopez on May 14, 2004 to amend the application to delete "species" in claim 1, line 3. It appears that this amendment to claim 1 was never entered.

In the Amendment filed July 15, 2002, 22 sheets of substitute drawings (including Figures 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14a, 14b, 15, 16, 17, 18a, 18b 19a, 19b, 20, 21 and 22) were submitted in response to the Examiner's objections in the Office Action and the Draftsperson's objections in the Notice of Draftsperson's Patent Drawing Review both mailed April 15, 2002. It appears that this amendment to the drawings was never entered. The 25 sheets of published drawings appear to be the original drawings, not the corrected 22 sheets of drawings.

Since these mistakes are clearly disclosed by the records filed with the Office, Applicant respectfully requests a Certificate of Correction. Following proper procedures for this PTO drawing mistake, the correct 22 sheets of drawings (Figures 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14a, 14b, 15, 16, 17, 18a, 18b 19a, 19b, 20, 21 and 22) are thus attached to the Certificate of Correction. An additional copy of the corrected drawings is enclosed for your convenience.

Additionally, the following mistake, corrected in Form PTO 44, was made by Applicants and is of a typographical nature, the mistake having occurred in good faith:

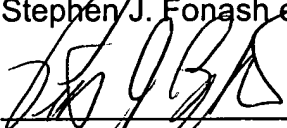
Claim 5, line 4, "species absorption" should read --species adsorption--.

More specifically, the word "adsorption" was misspelled in the claims. The proper spelling of the word can be found in the specification, for example at page 18, line 18. Furthermore, the modification of the spelling of this word does not affect the patentability of this claim. Therefore, it is clear that these corrections do not amount to a change in the patent that would constitute new matter or would require re-examination. Since this mistake was made by Applicants, a check for \$100.00 is enclosed herewith as required under 37 CFR 1.20(a).

We authorize the Commissioner to charge of any additional fees and crediting any overpayment to our Deposit Account No. 03-2410 (Order No. 30626-101).

If there are any questions remaining please call:
PETER J. BORGHETTI at (617) 854-4000.

Dated: October 29, 2004

Respectfully submitted,
Stephen J. Fonash et al., Applicants
By: 
PETER J. BORGHETTI
Reg. No. 42,345
Attorney for Applicants

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(Also Form PTO-1050)

UNITED STATES PATENT AND TRADEMARK OFFICE

CERTIFICATE OF CORRECTION

PATENT NO : 6,794,196 B2

DATED : September 21, 2004

INVENTOR(S) : Fonash et al.

It is certified that error appears in the above-identified patent and that said Letters Patent are hereby corrected as shown below:

Drawings:

Delete Figures 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14a, 14b, 15, 16, 17, 18a, 18b, 19a, 19b, 20, 21 and 22, and substitute therefore Figures 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14a, 14b, 15, 16, 17, 18a, 18b 19a, 19b, 20, 21 and 22 shown on the attached 22 pages.

Claims:

Claim 1, line 3 (column 26, line 61), "and species adsorption" should read --and adsorption--; and

Claim 5, line 4 (column 27, line 23), "species absorption" should read --species adsorption--.

MAILING ADDRESS OF SENDER: Peter Borghetti
Perkins, Smith & Cohen, LLP
One Beacon Street
Boston, MA 02108-3106

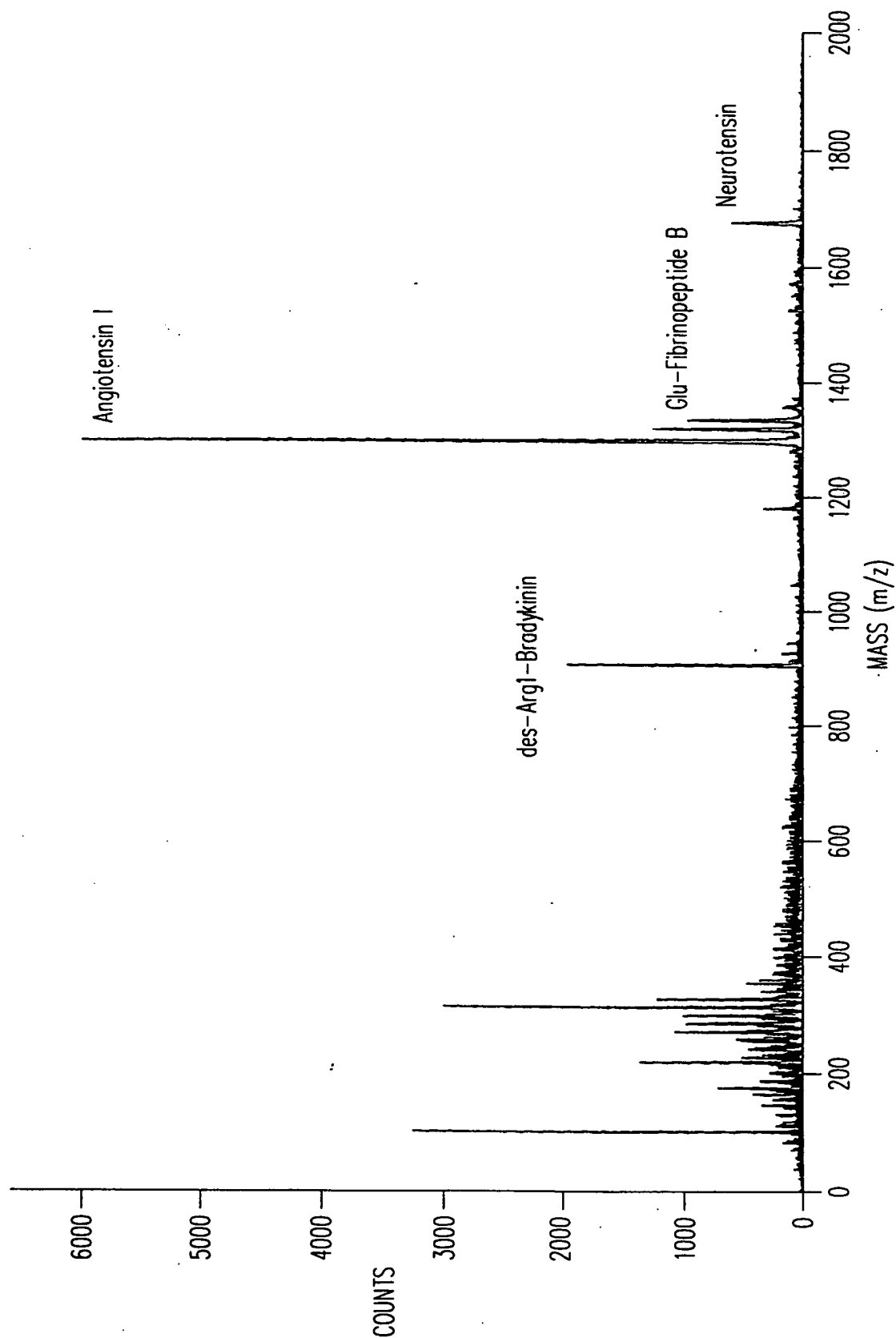
PATENT NO. 6,794,196 B2

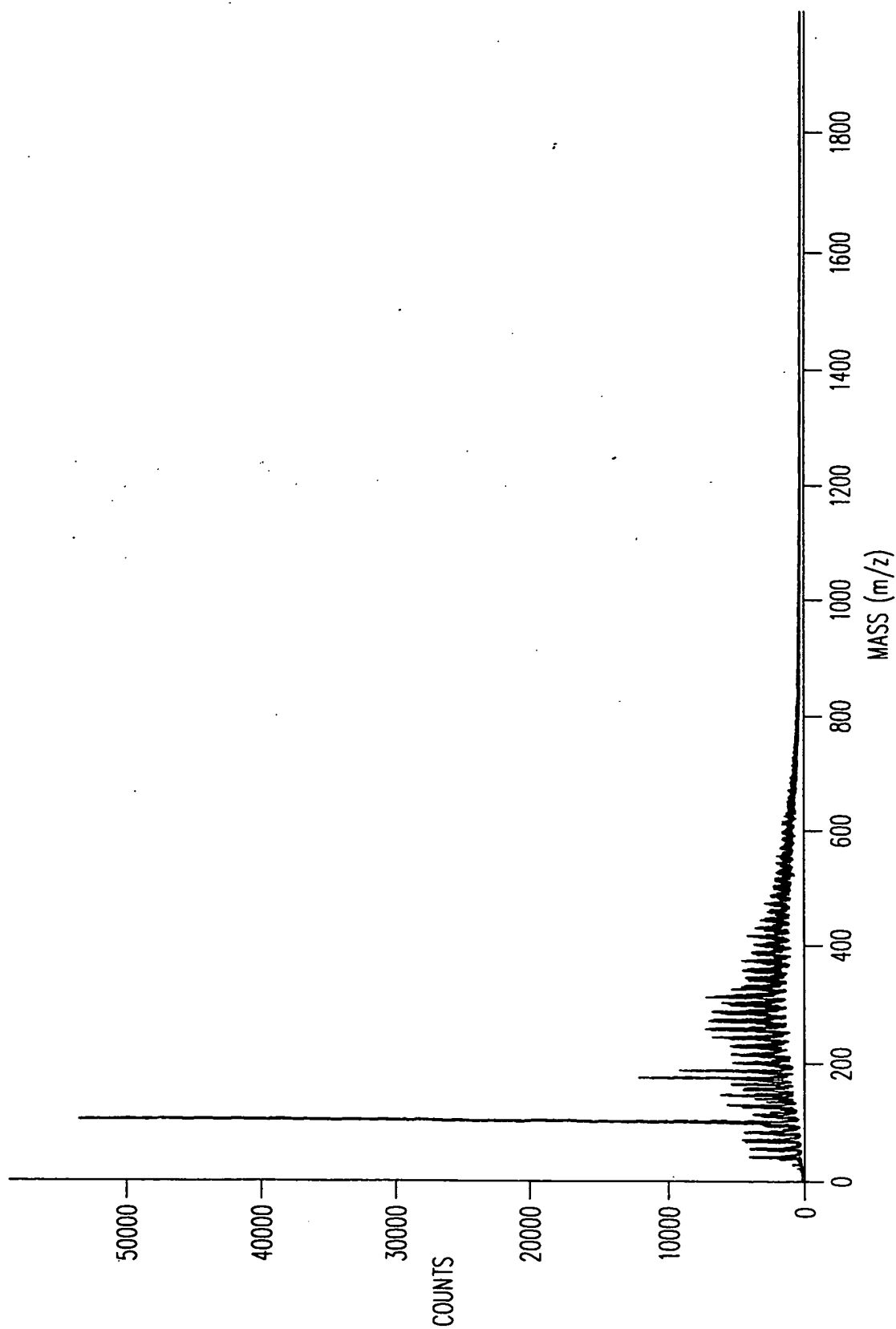
No. of additional copies

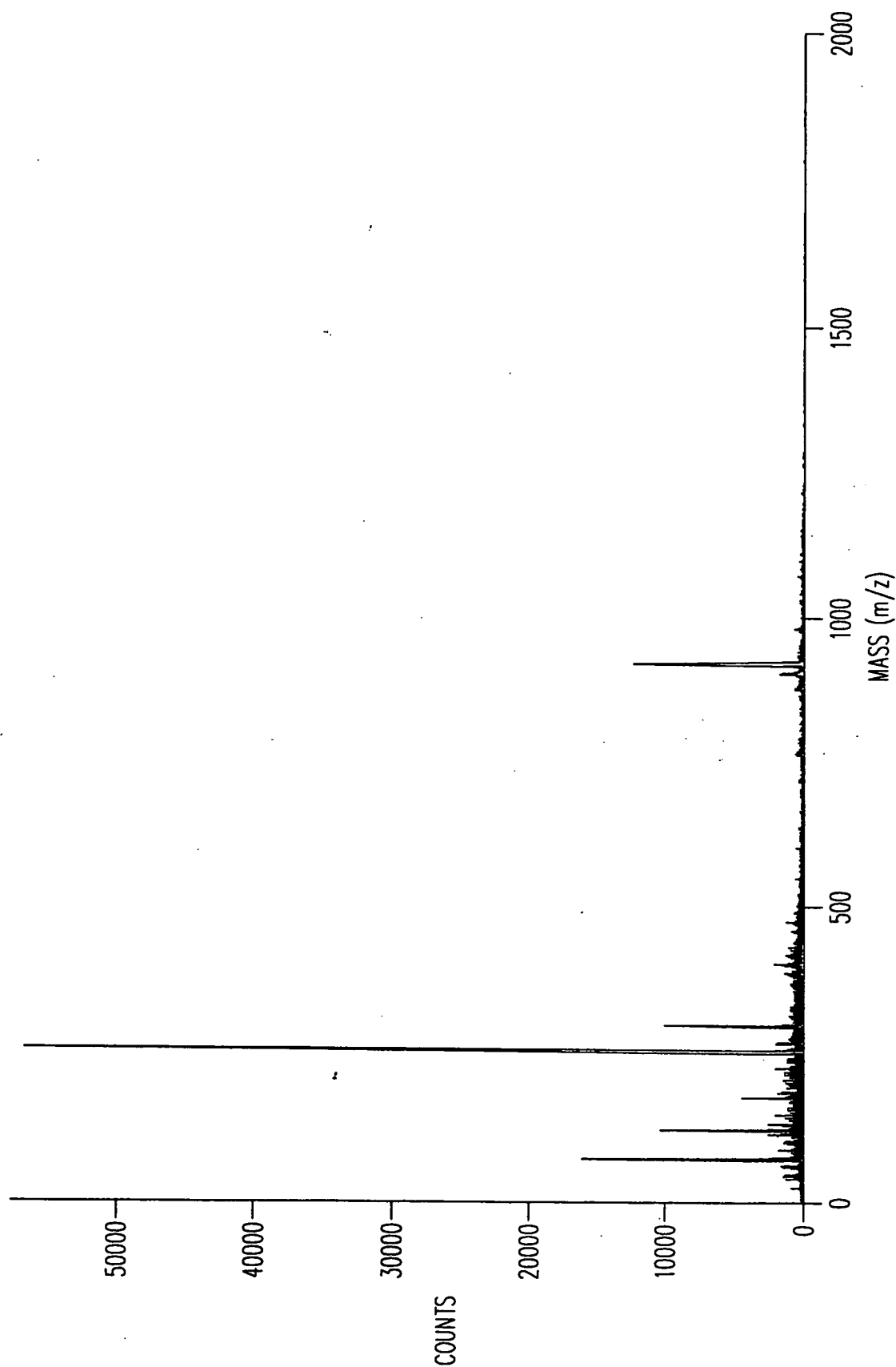


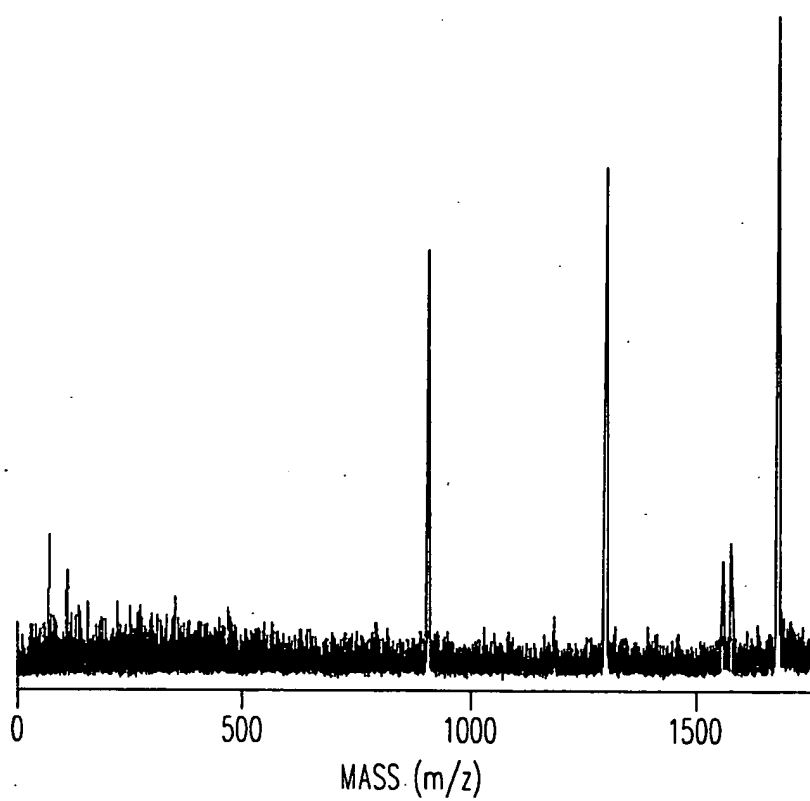
Burden Hour Statement: This form is estimated to take 1.0 hour to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

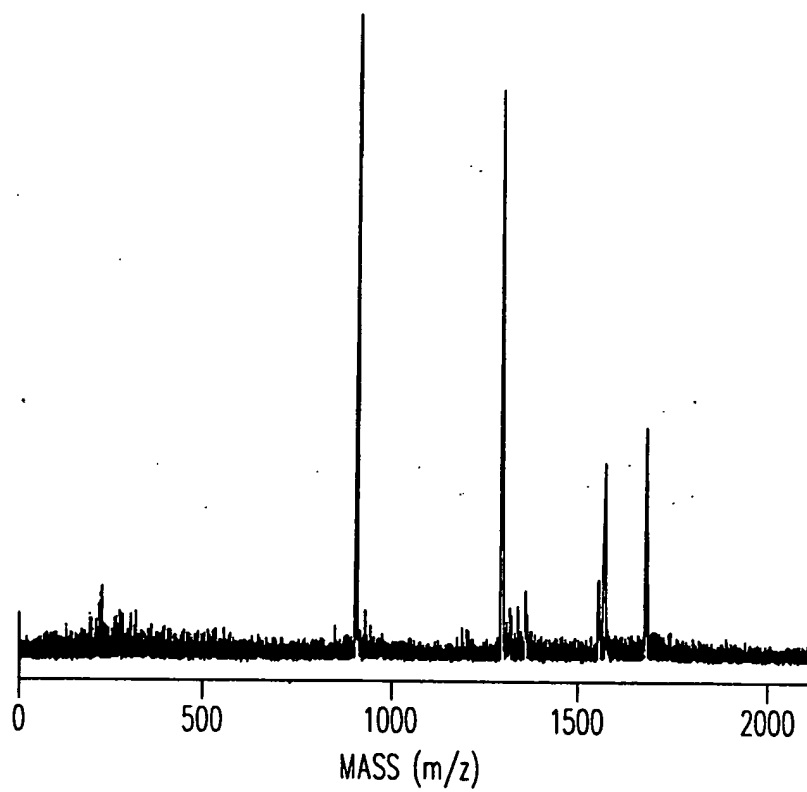
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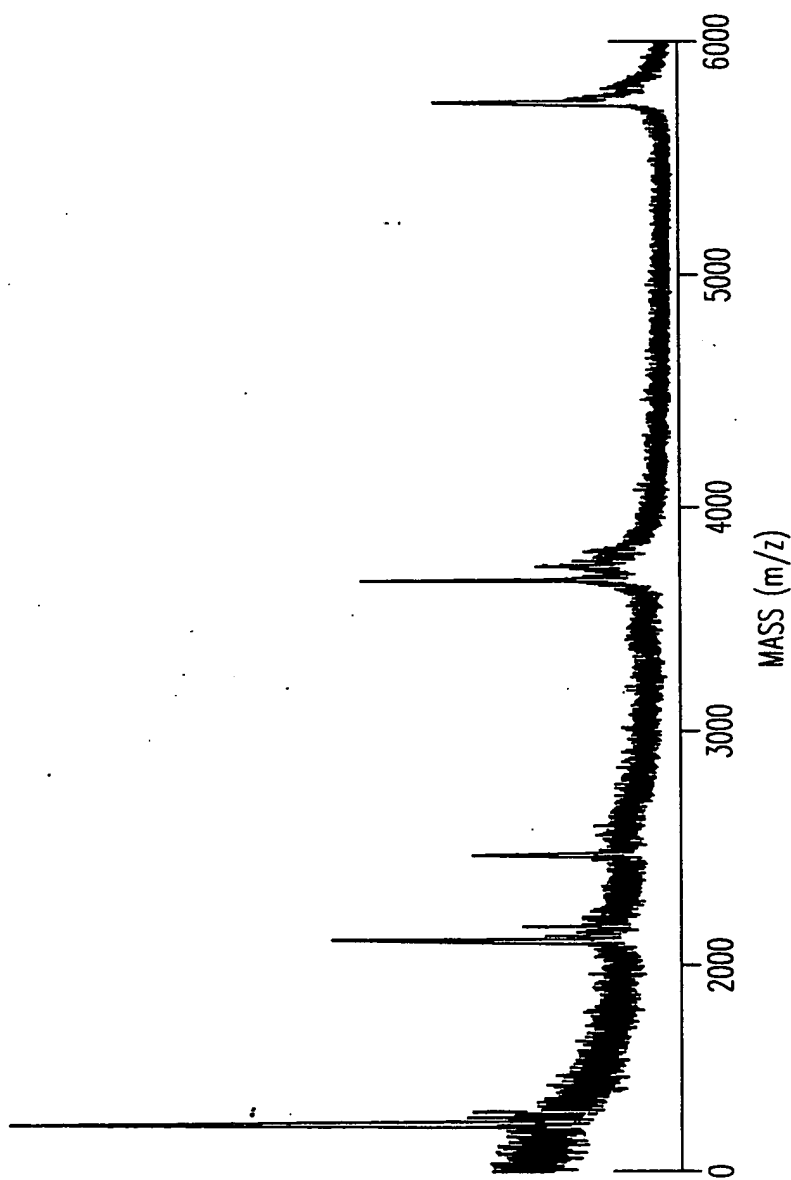
**FIG. 1**

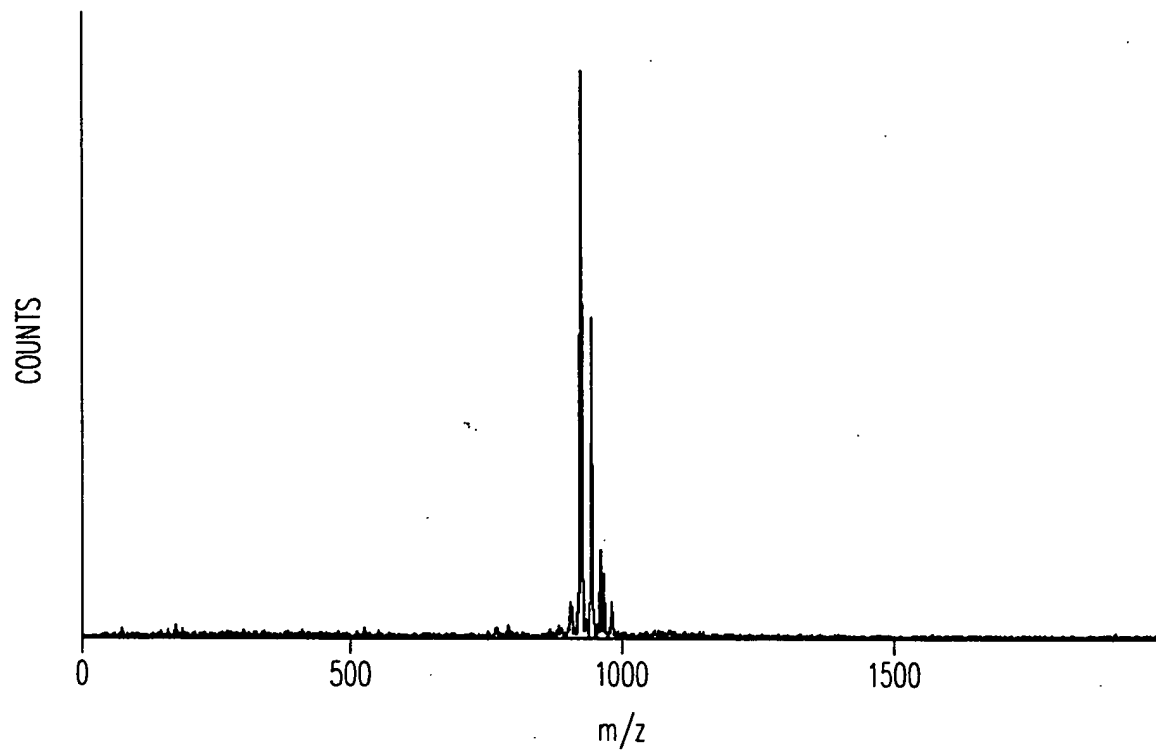
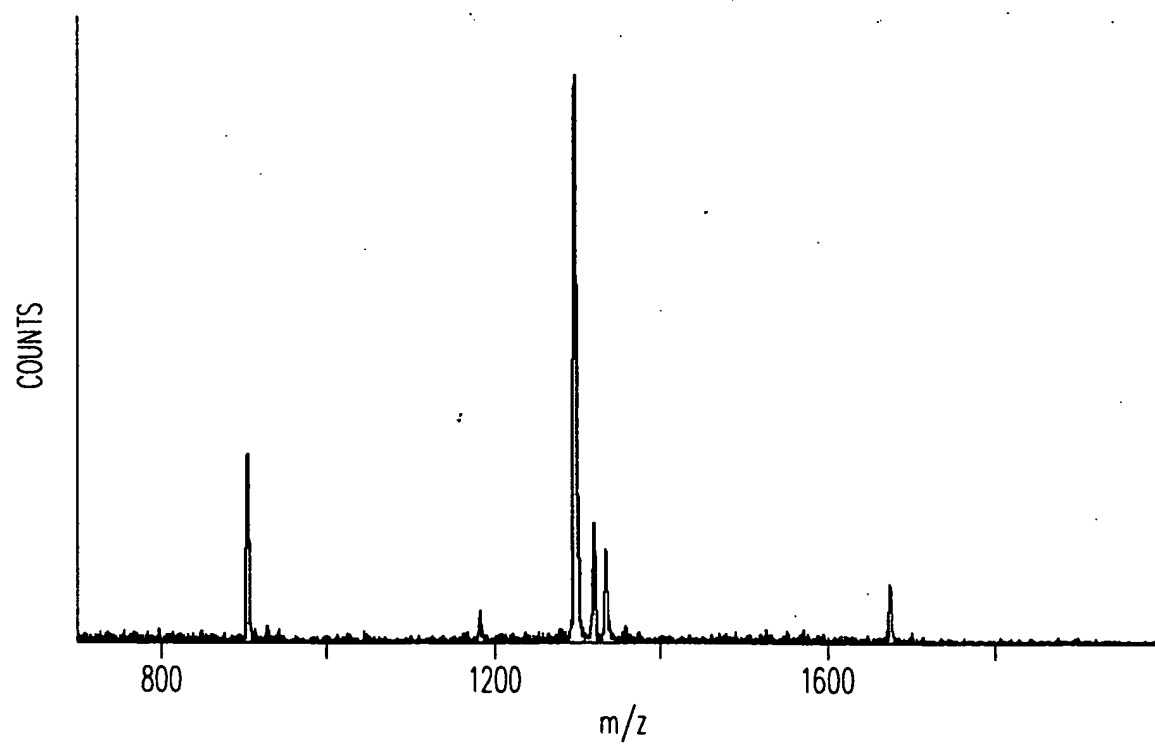
**FIG. 2**



**FIG. 4**

**FIG. 5**

**FIG. 6**

**FIG. 7****FIG. 8**

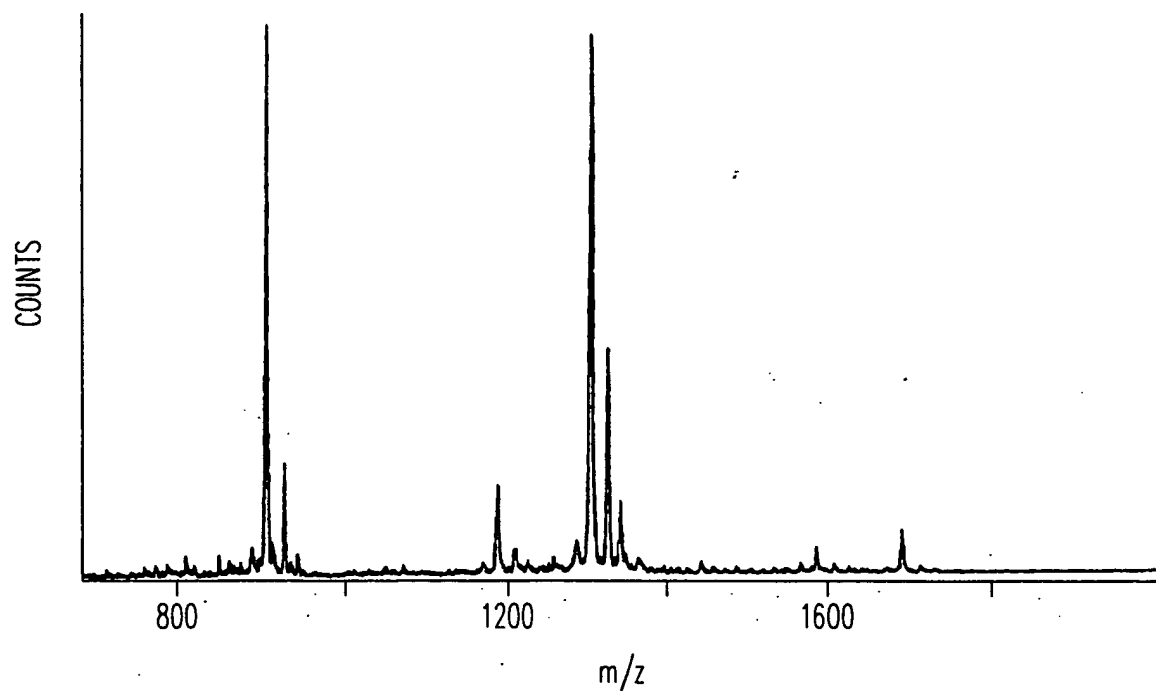


FIG. 9

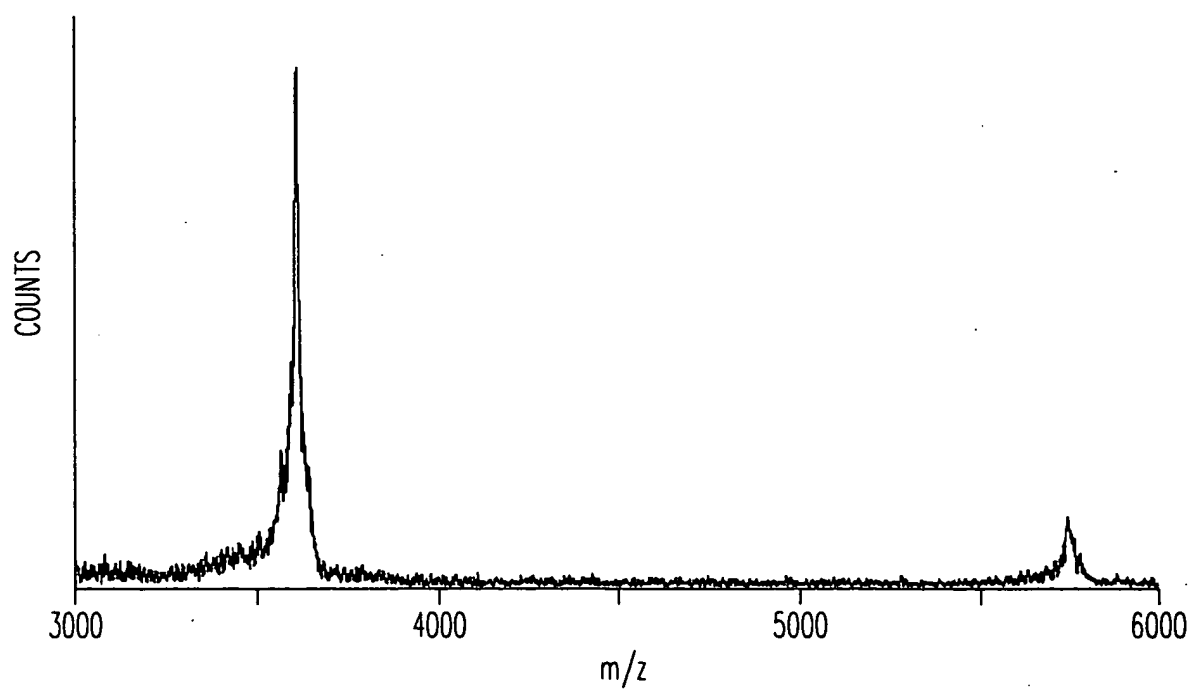


FIG. 10

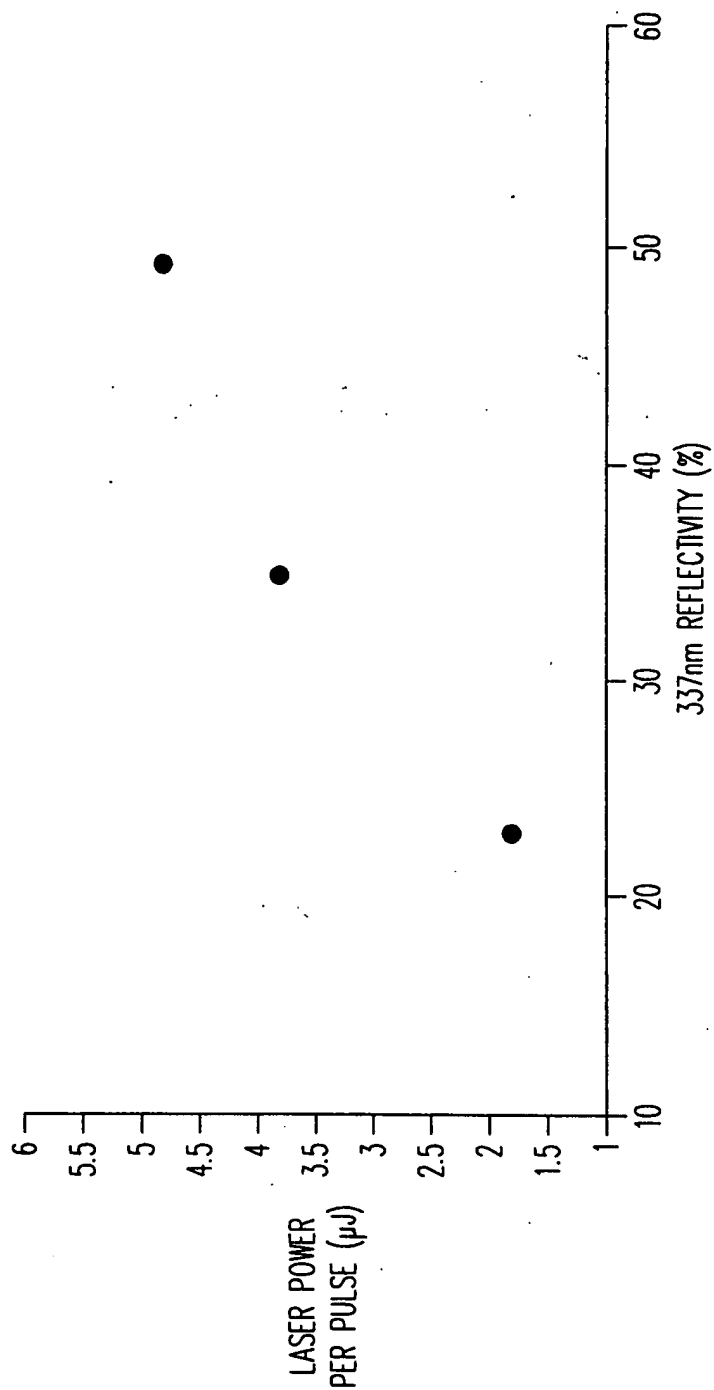


FIG. 11

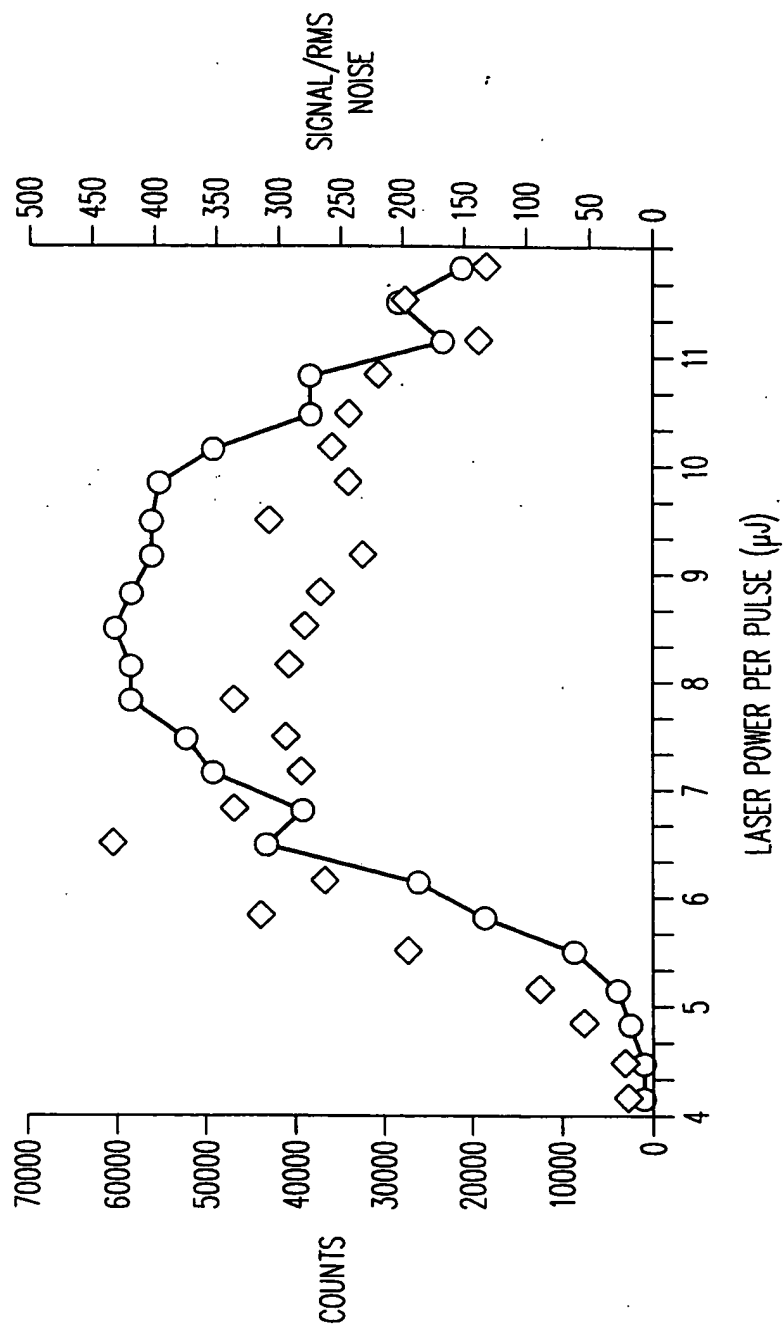
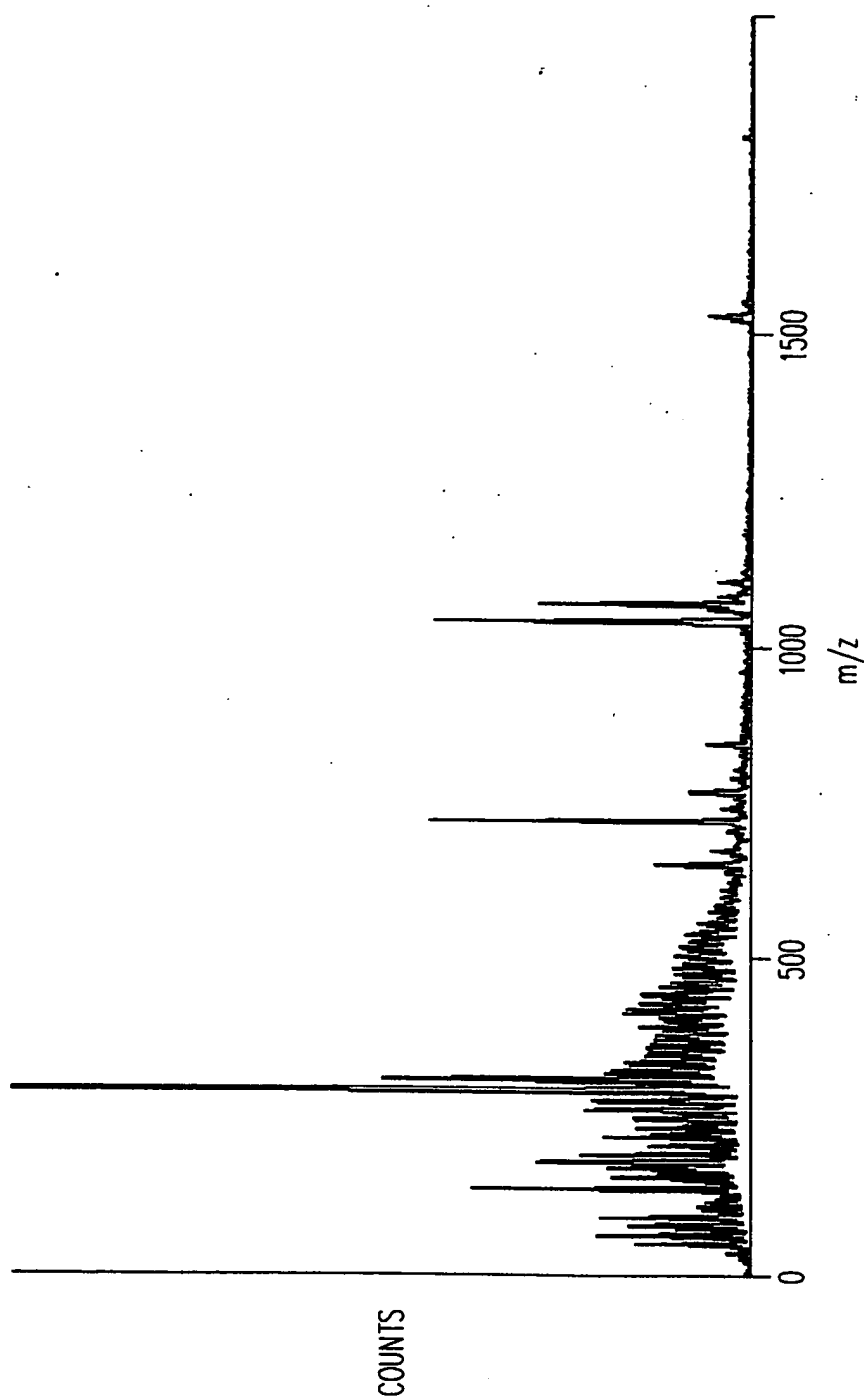
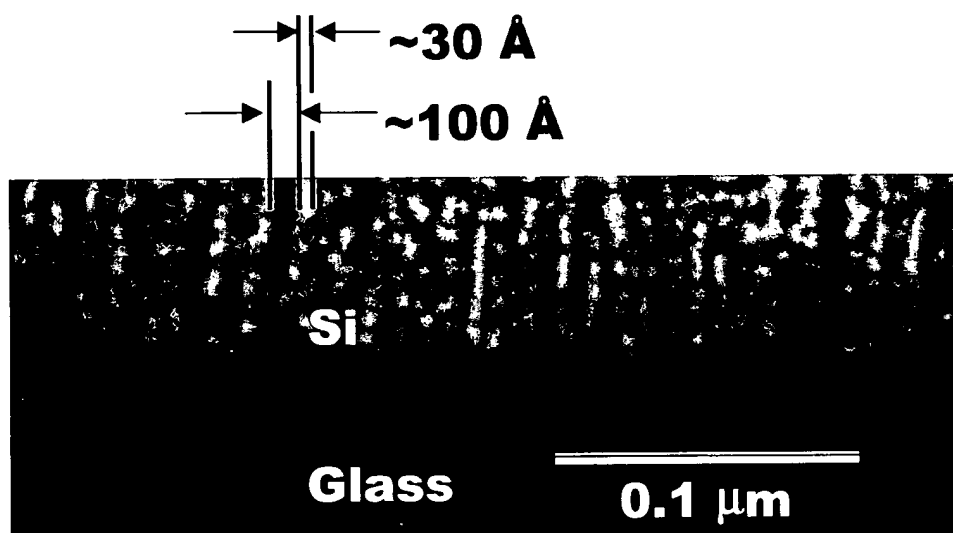


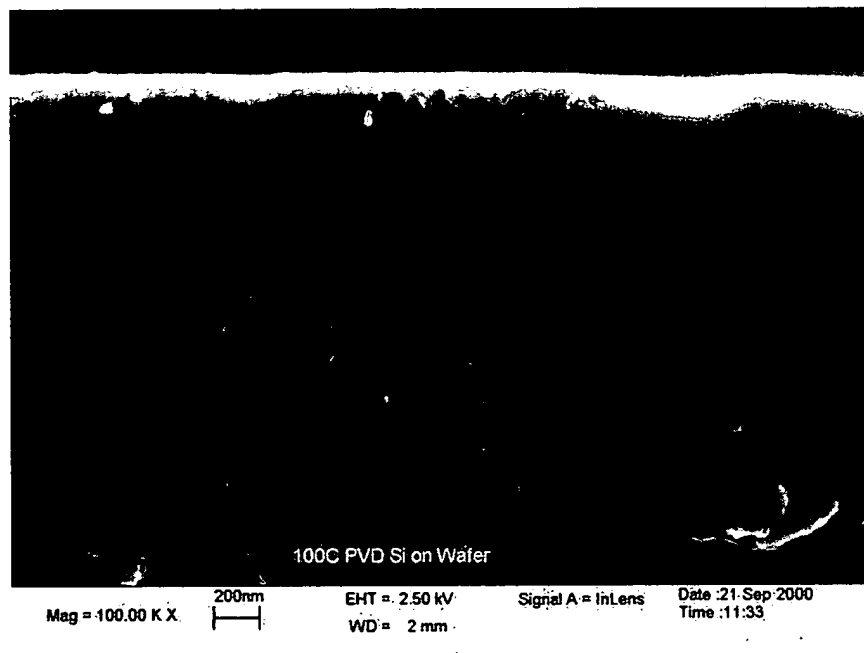
FIG. 12

**FIG. 13**

DEPOSITION CONDITIONS

TEMPERATURE	120 °C
POWER	500 W
PRESSURE	7.8 mTorr

FIG. 14a

**FIG. 14b**

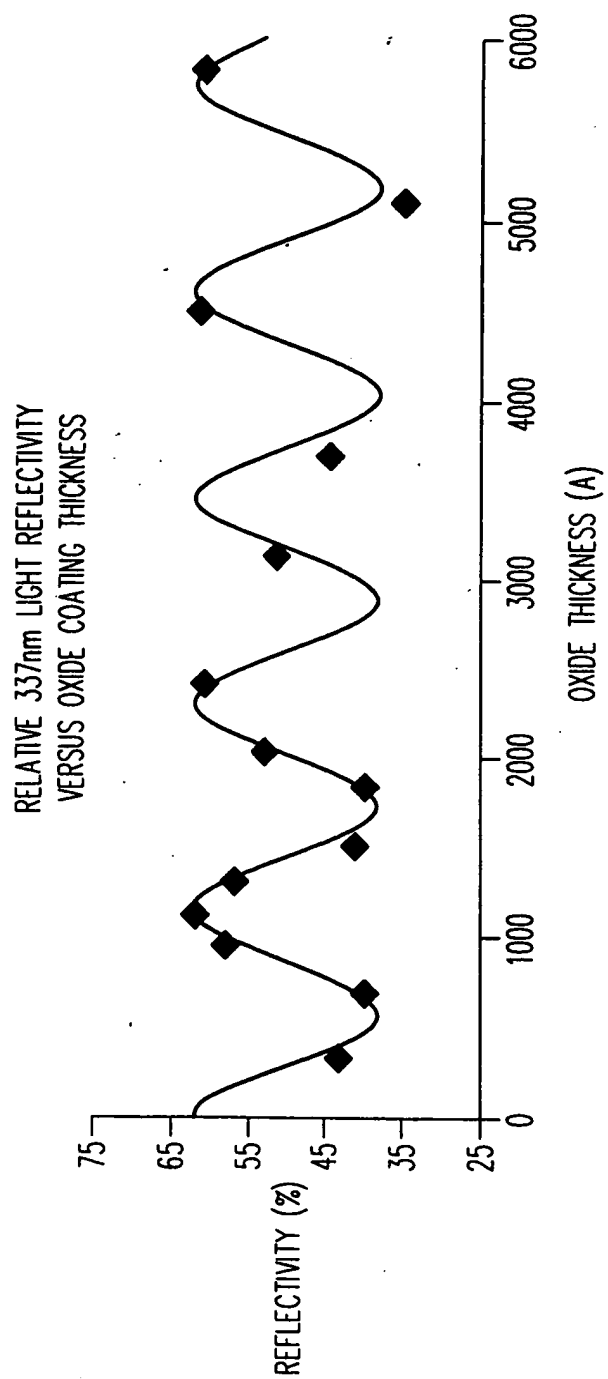


FIG. 15

RELATIVE MOLECULAR DETECTION COUNTS
VERSUS OXIDE COATING THICKNESS

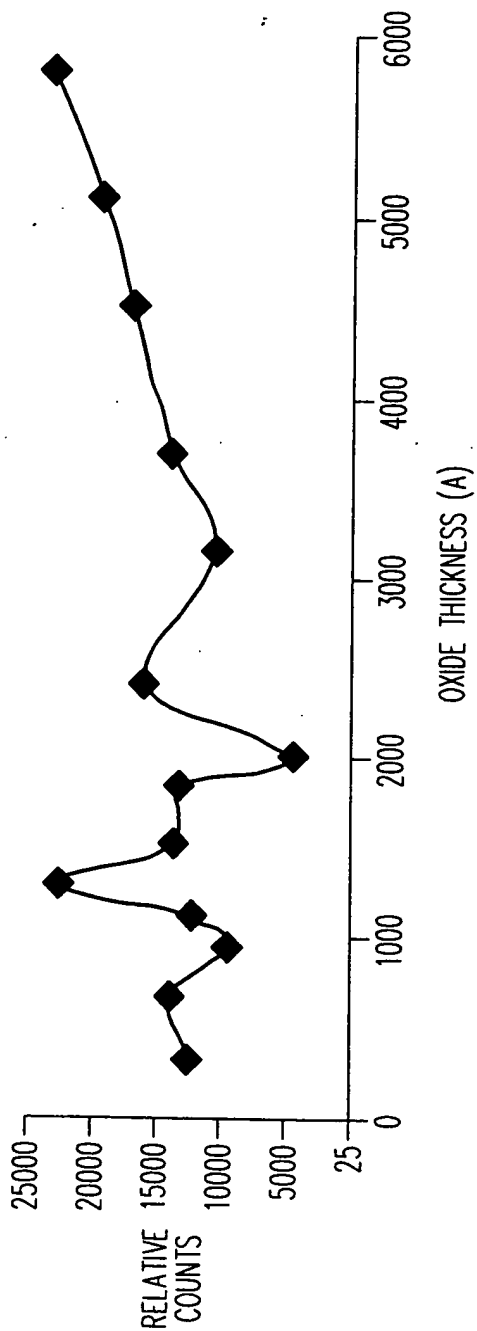
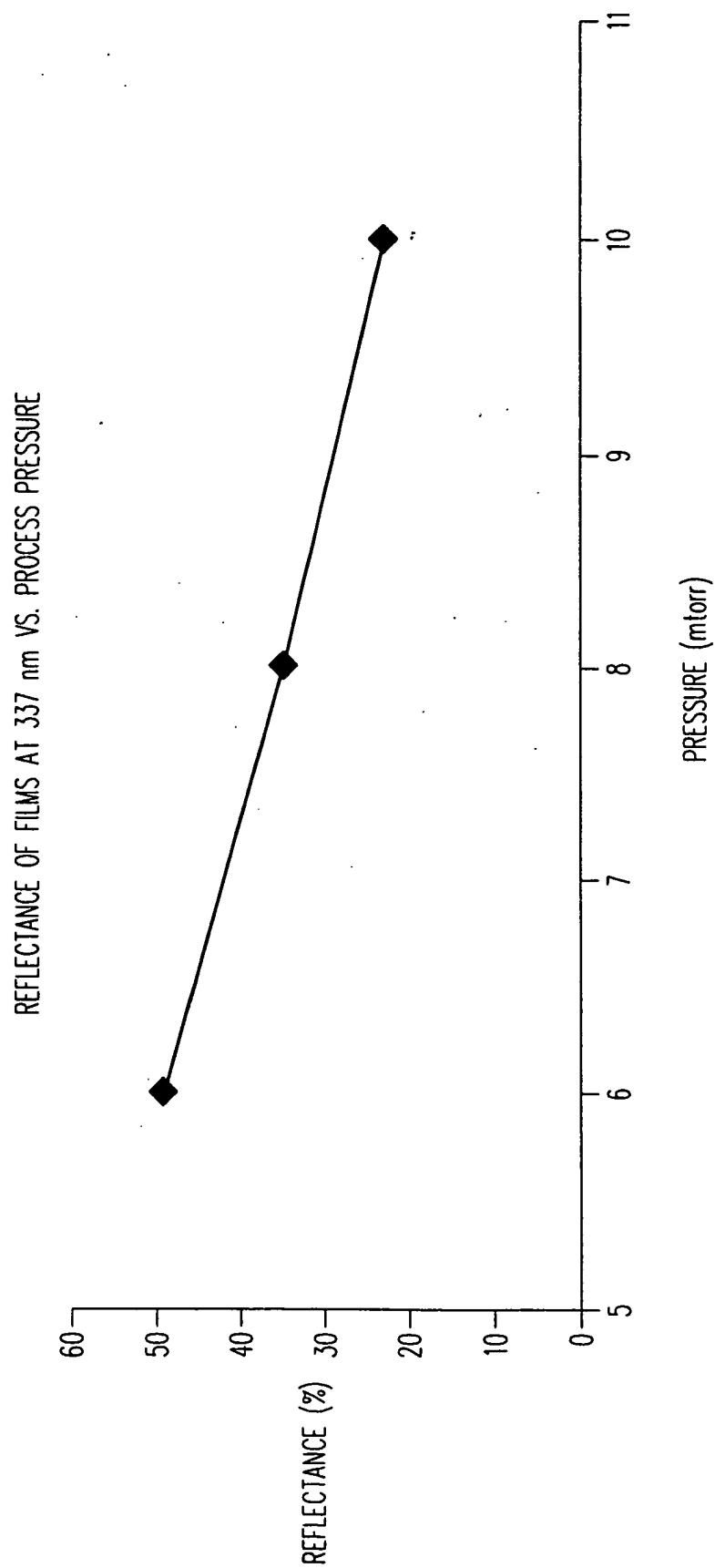
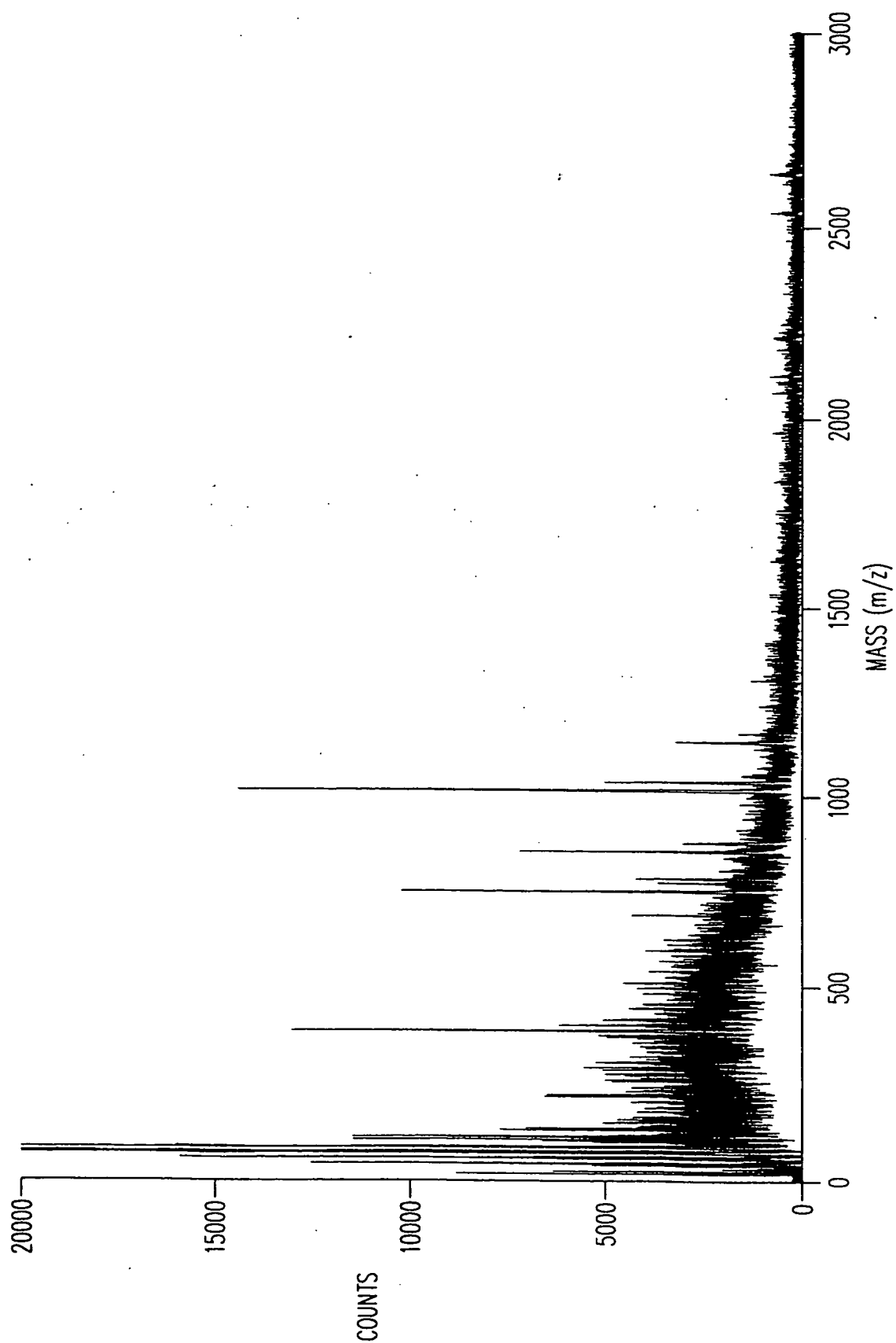
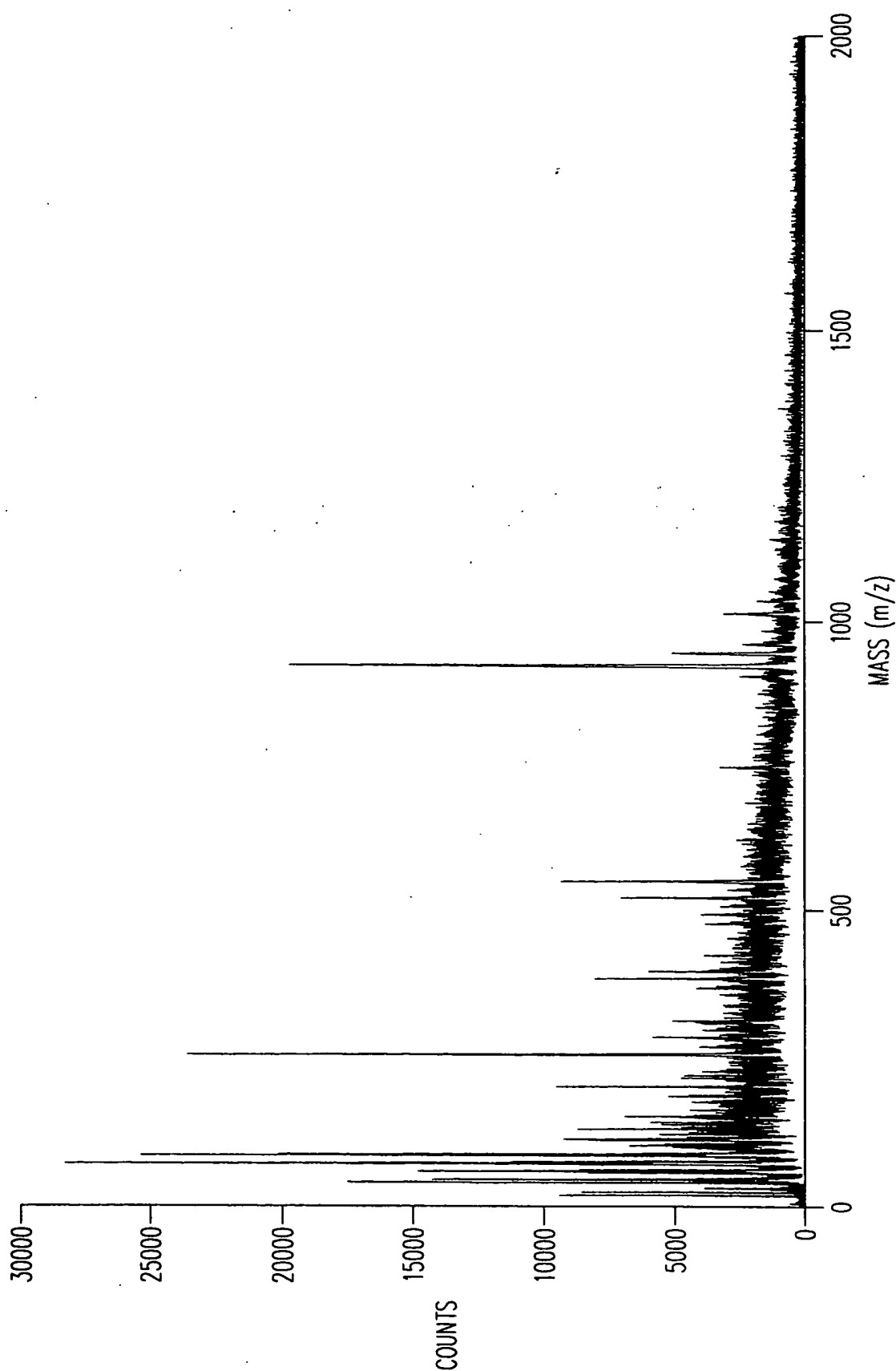
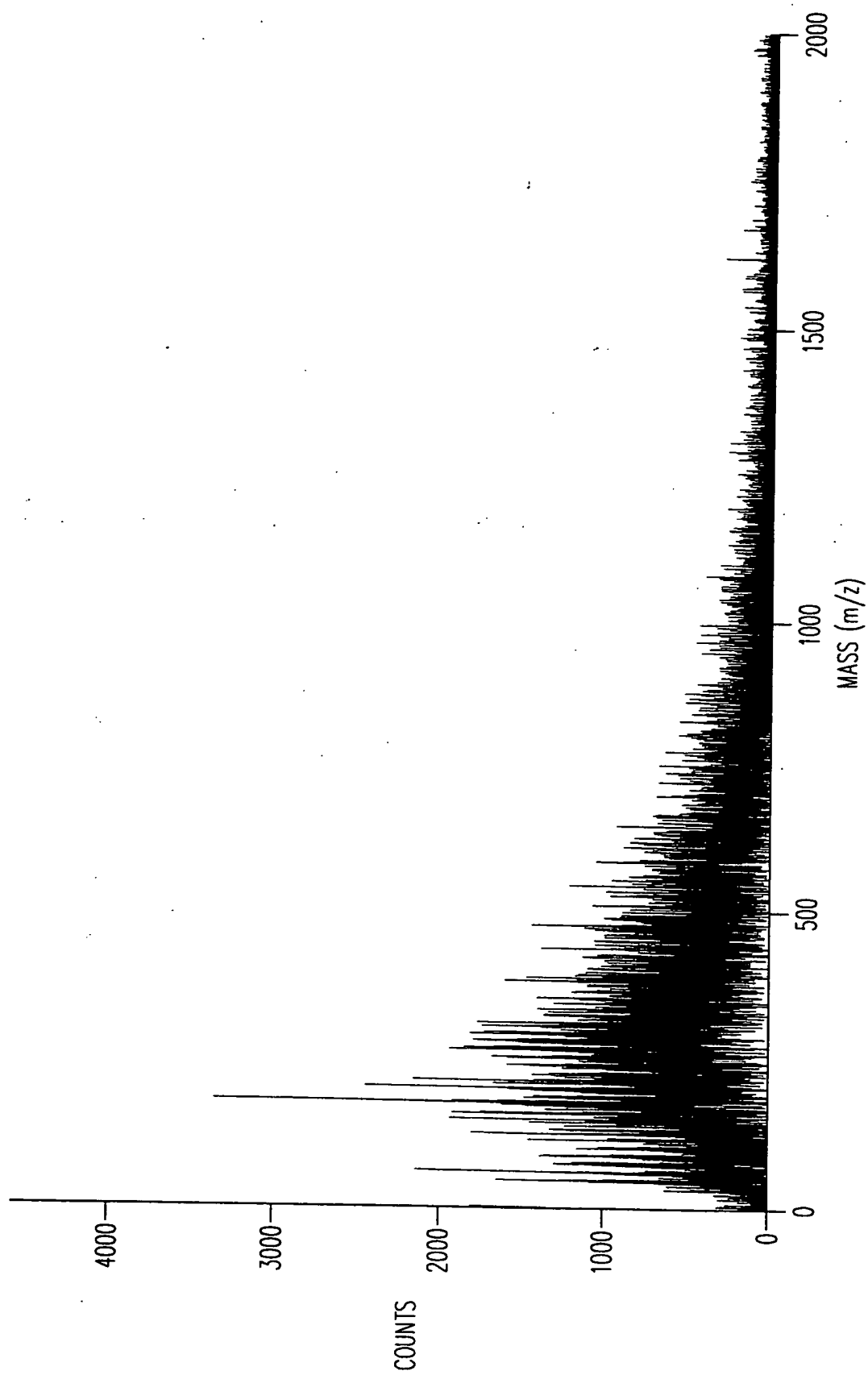


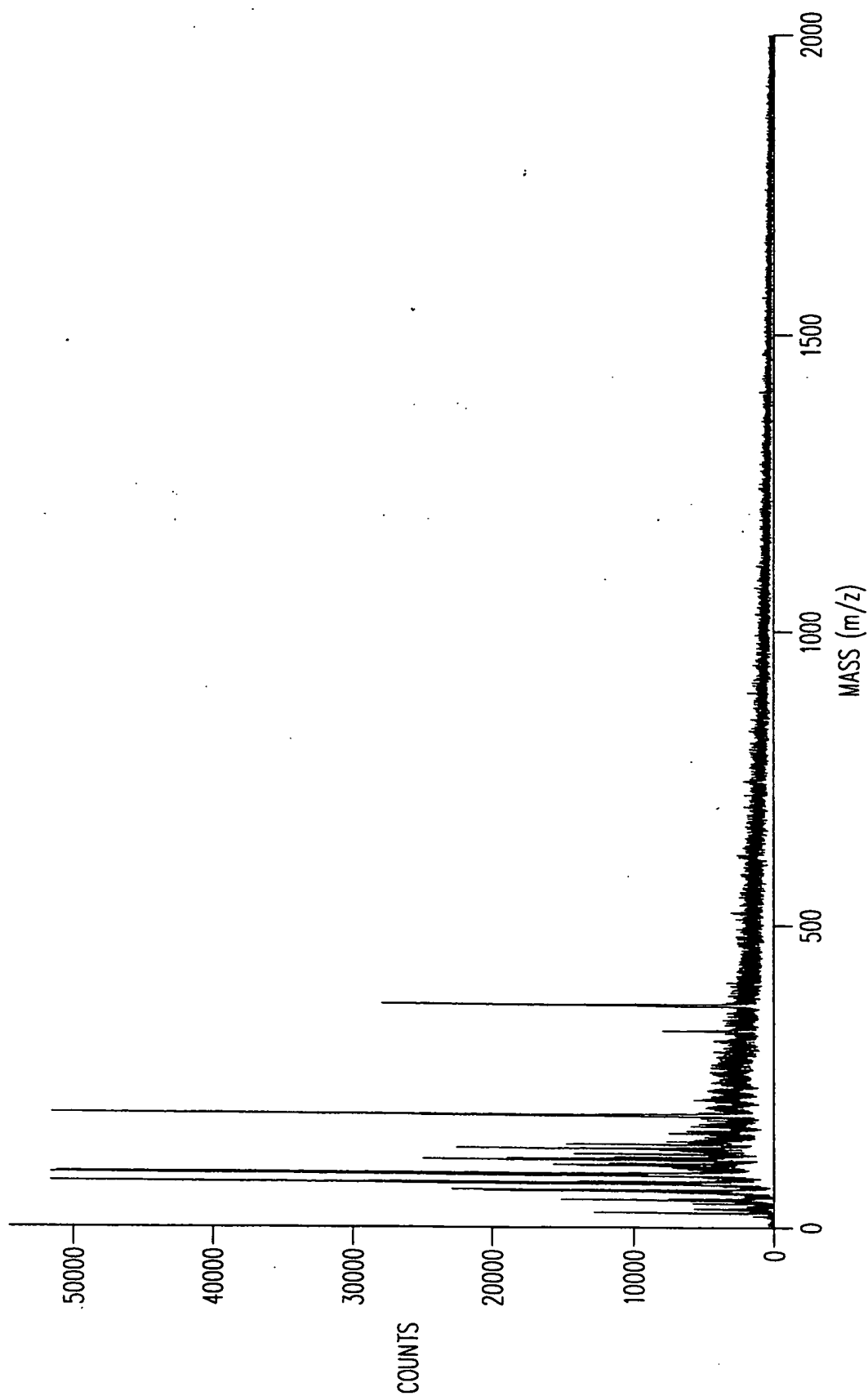
FIG. 16

**FIG. 17**

**FIG. 18a**

**FIG. 18b**

**FIG. 19a**

**FIG. 19b**

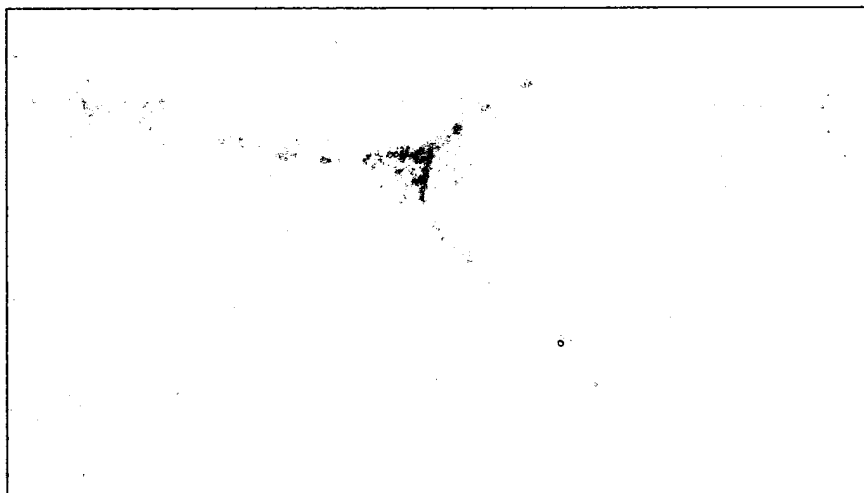
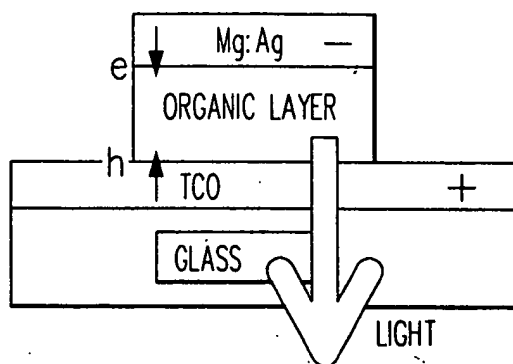
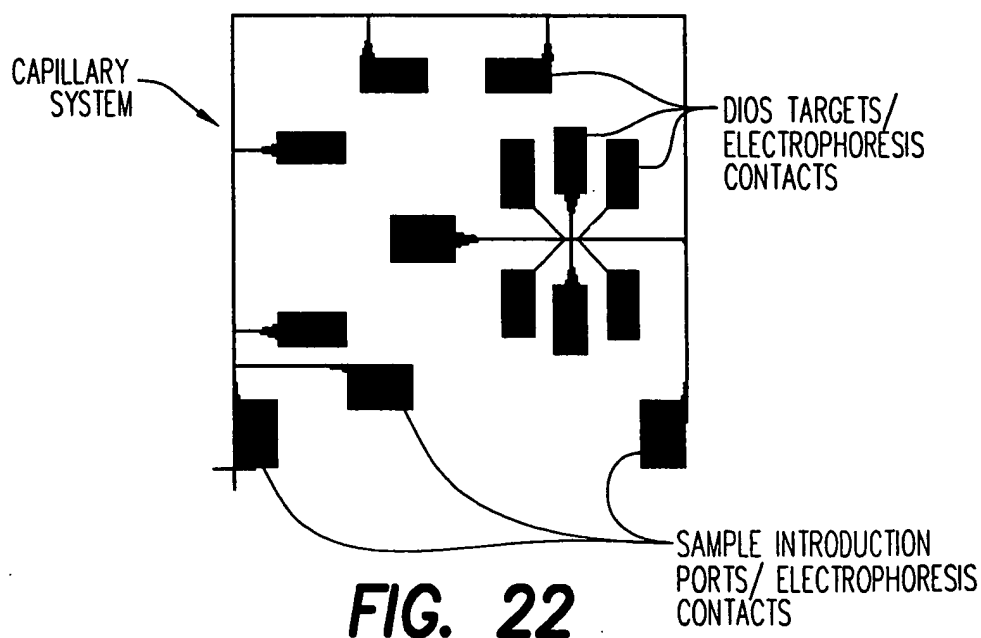


FIG. 20

**FIG. 21****FIG. 22**

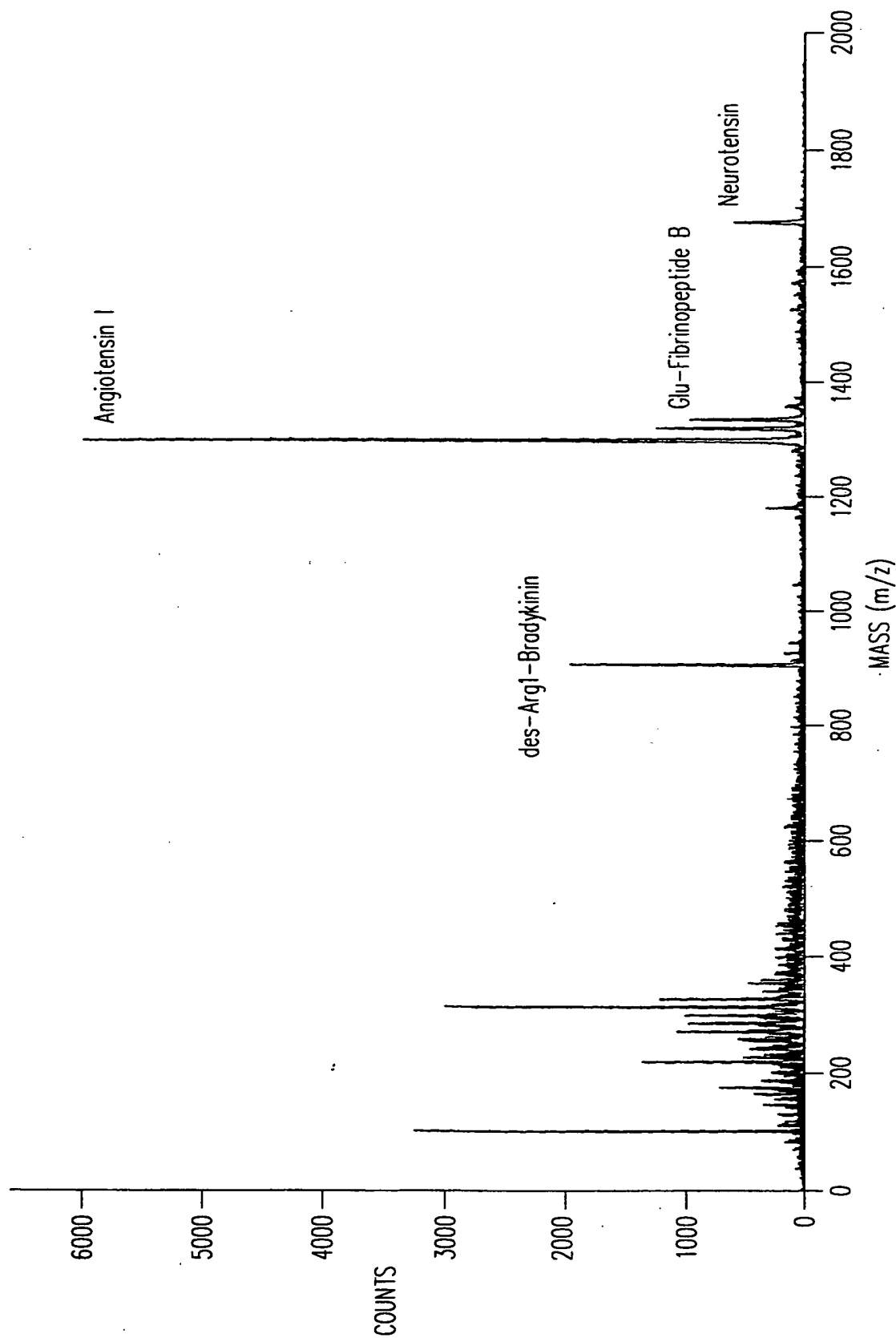
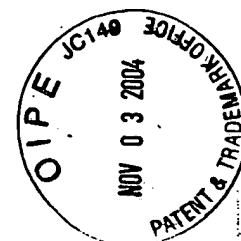
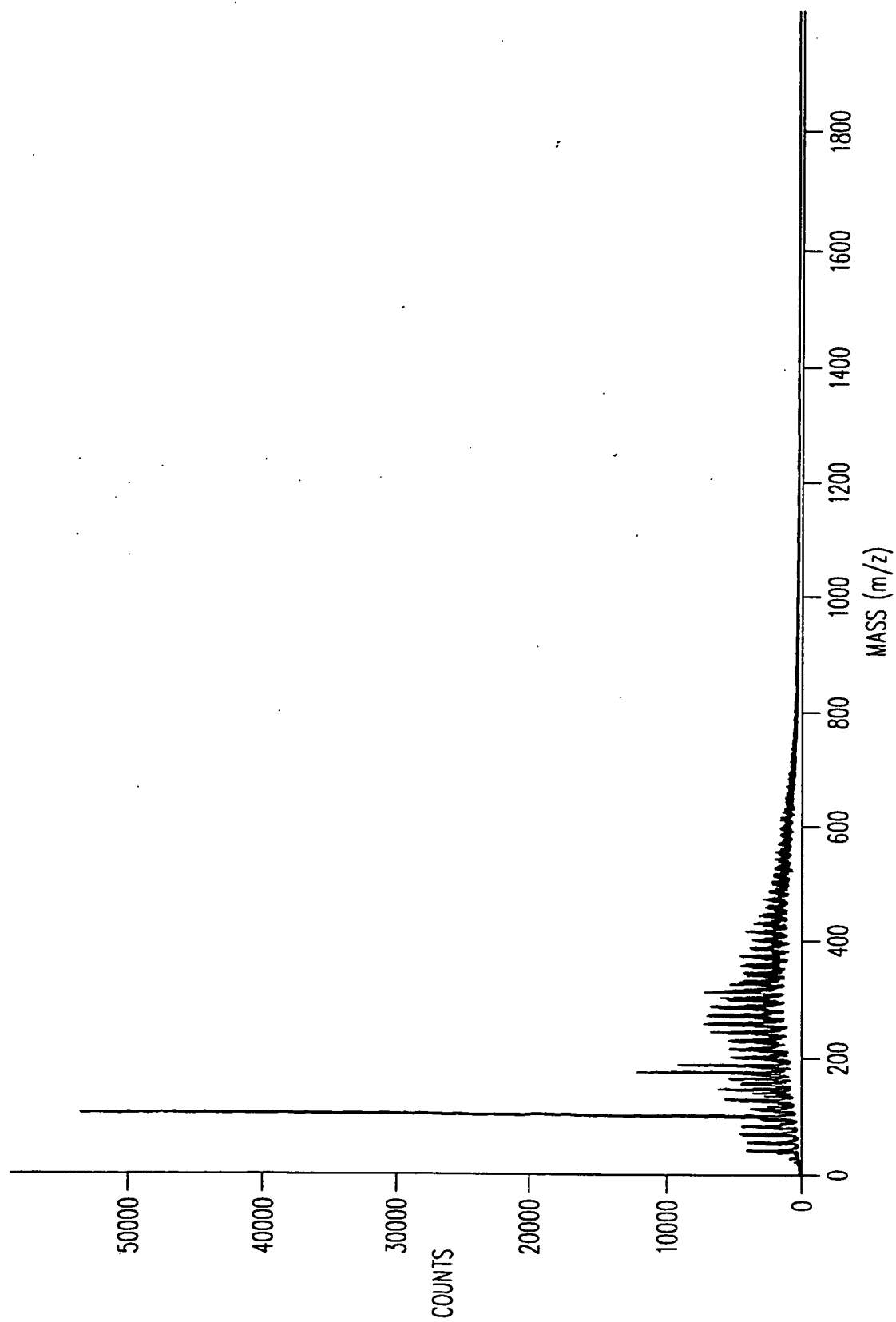
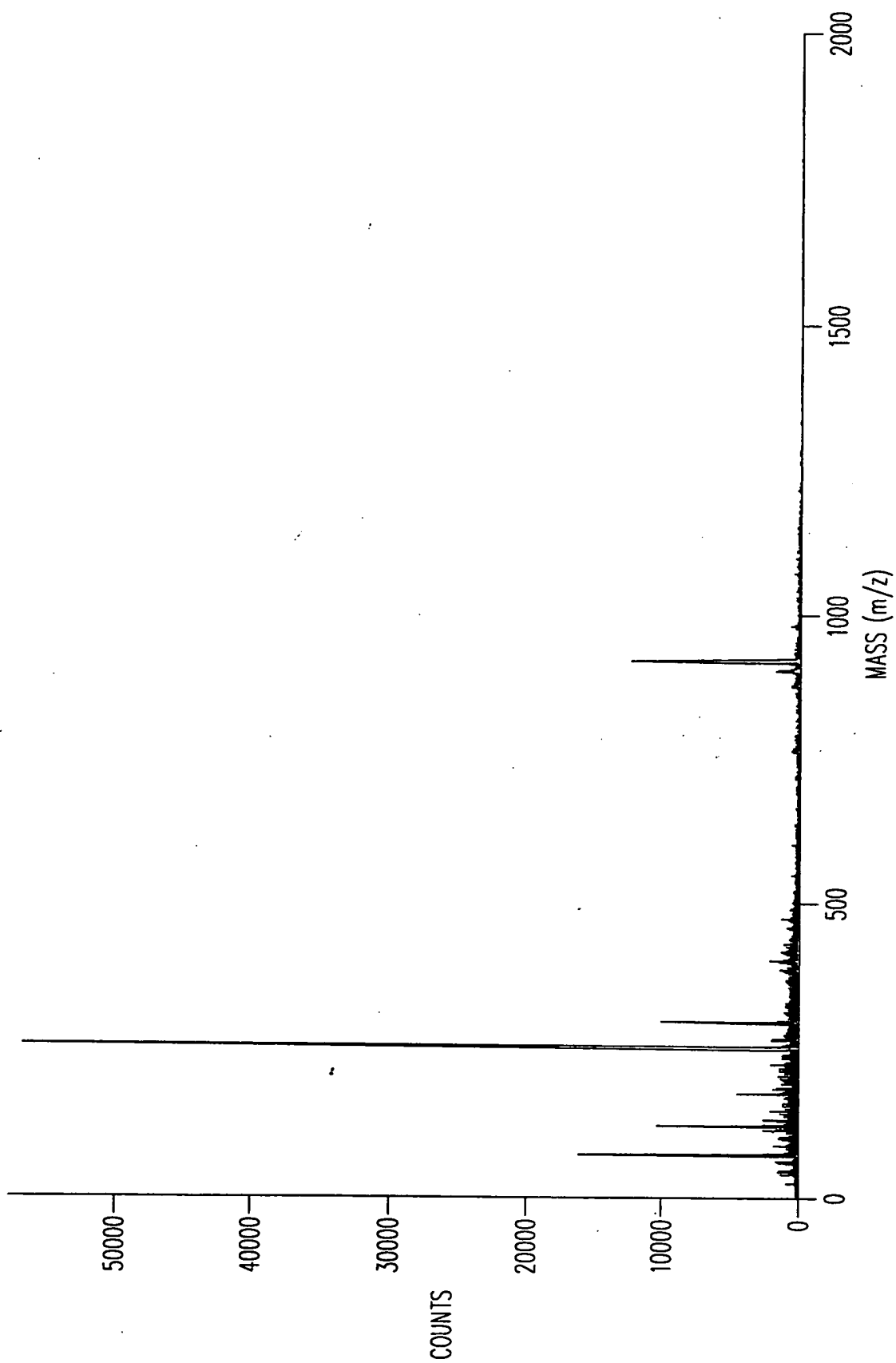
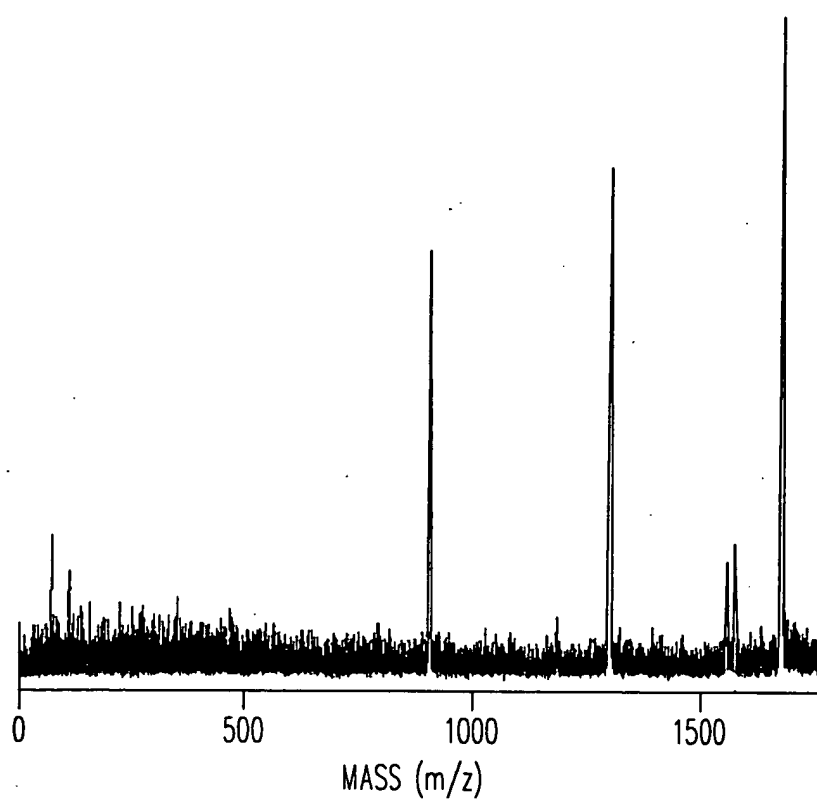


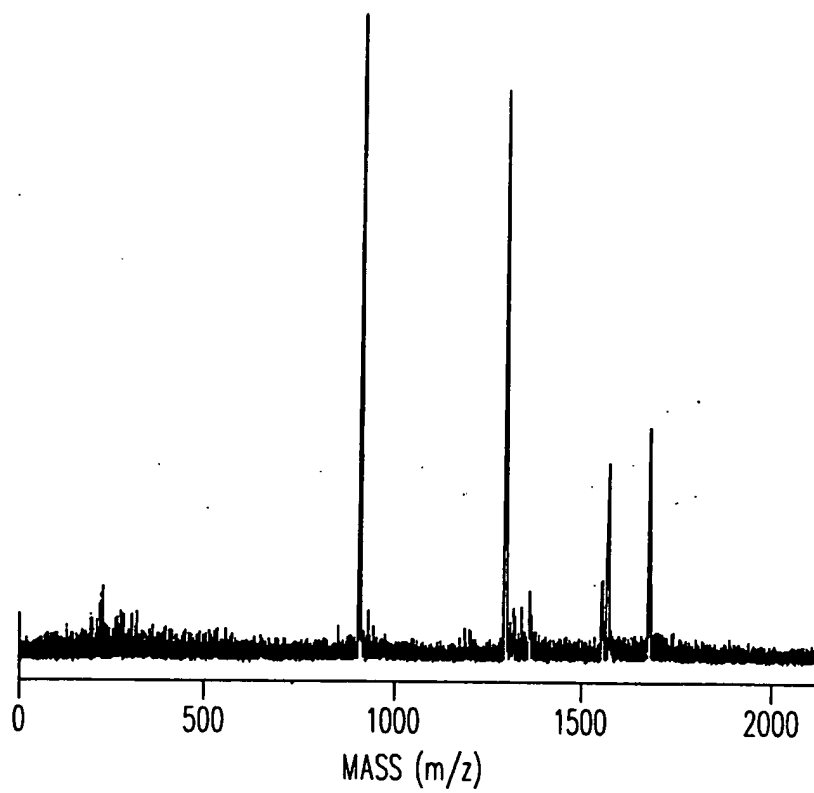
FIG. 1

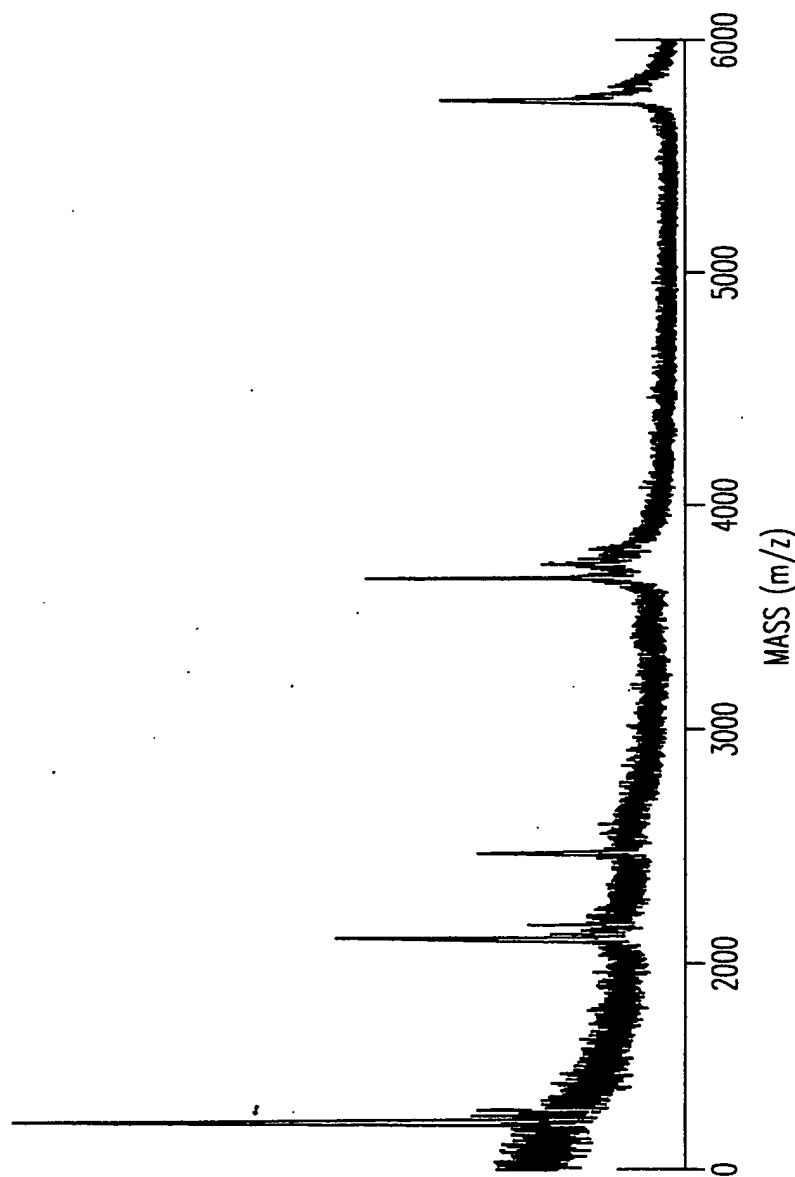


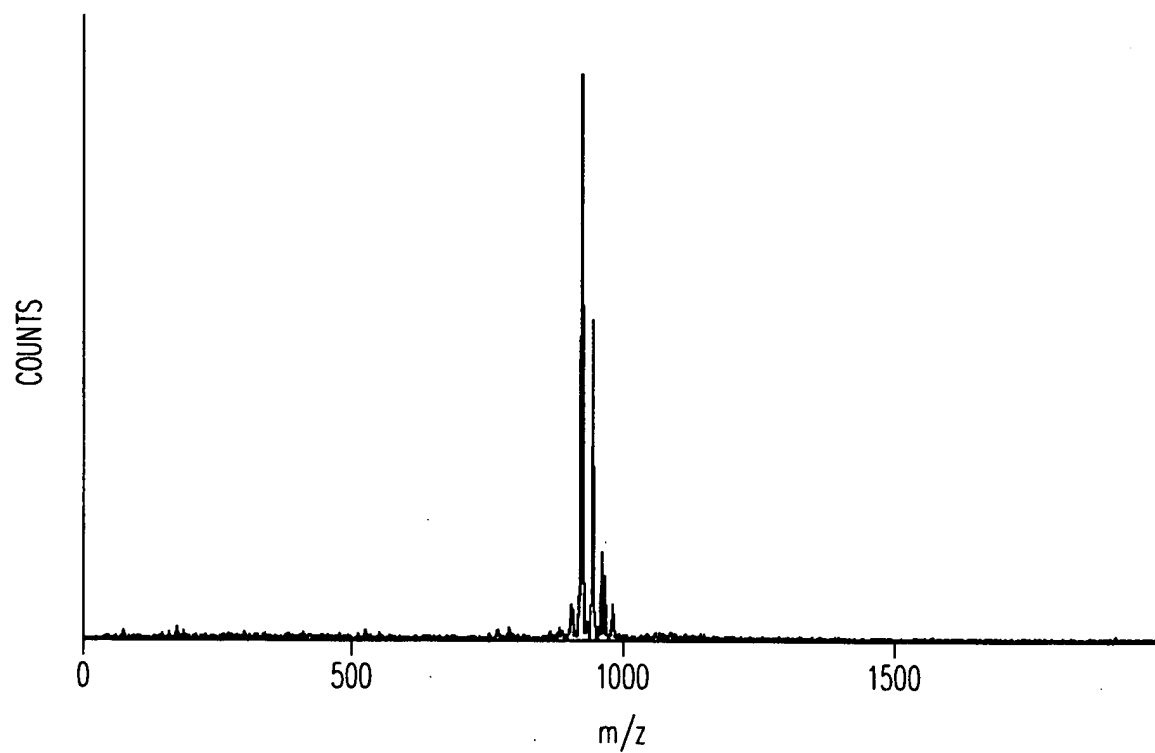
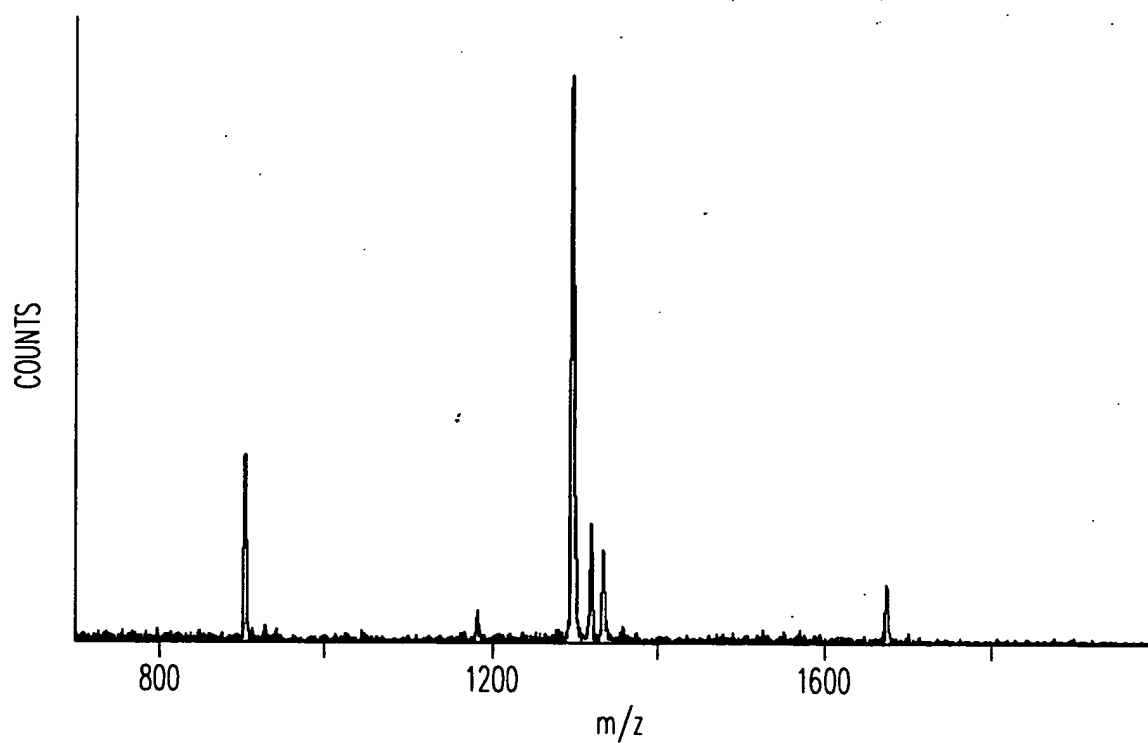
**FIG. 2**

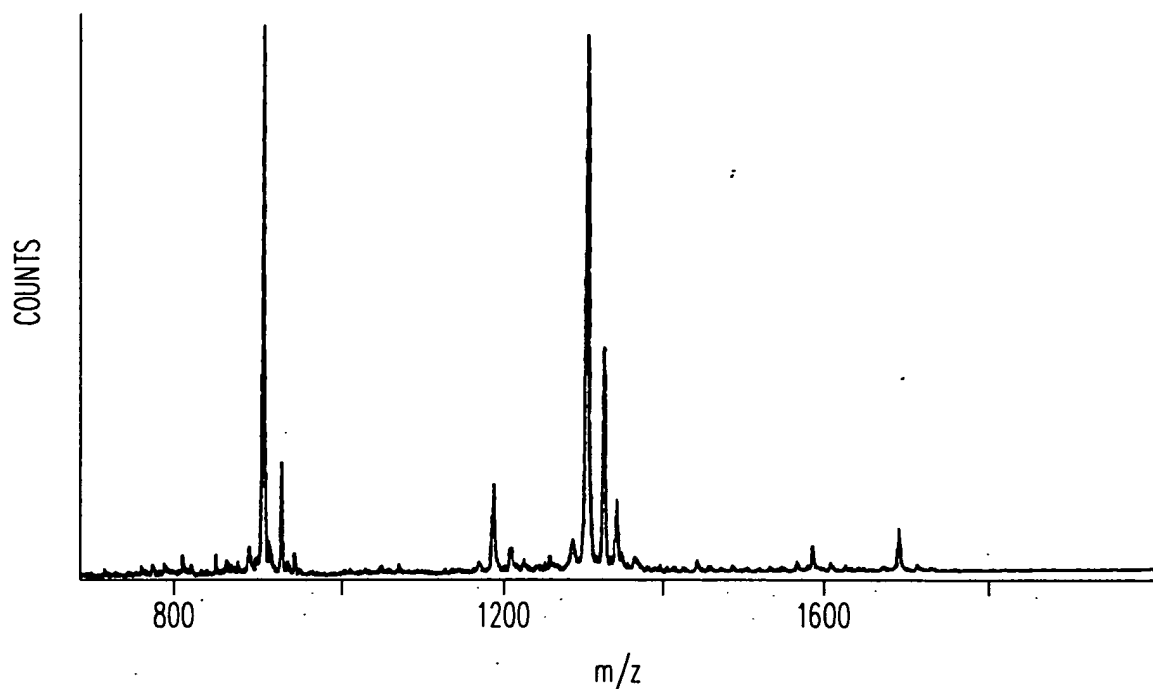
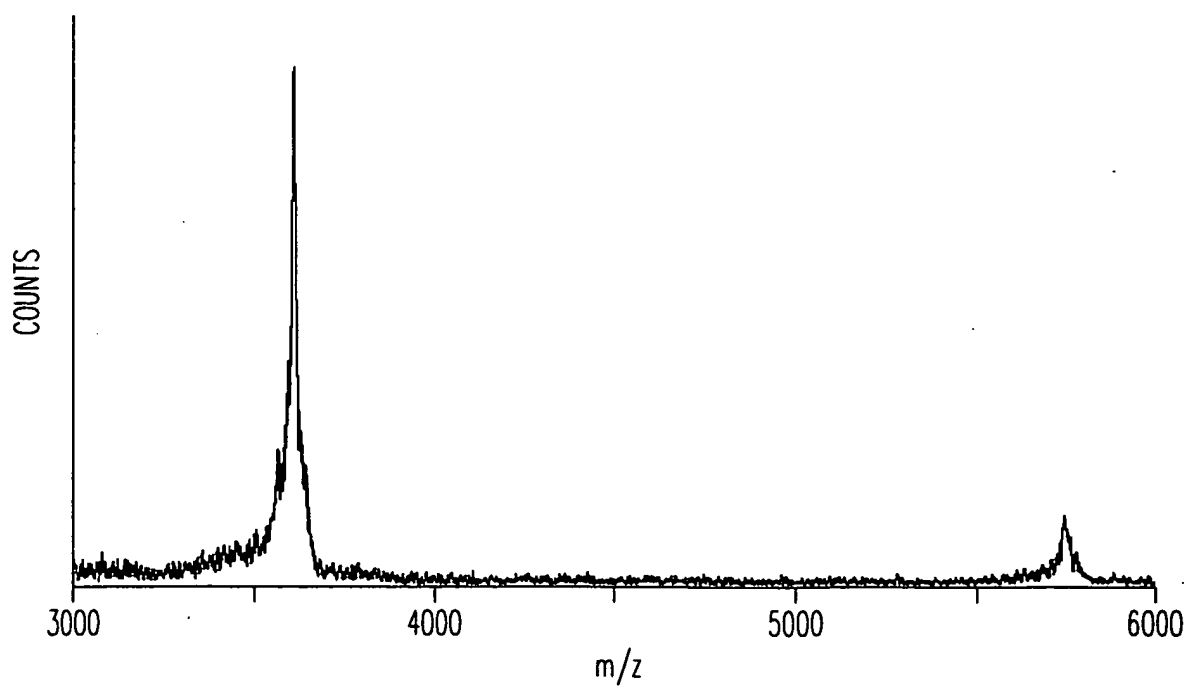
**FIG. 3**

**FIG. 4**

**FIG. 5**

**FIG. 6**

**FIG. 7****FIG. 8**

**FIG. 9****FIG. 10**

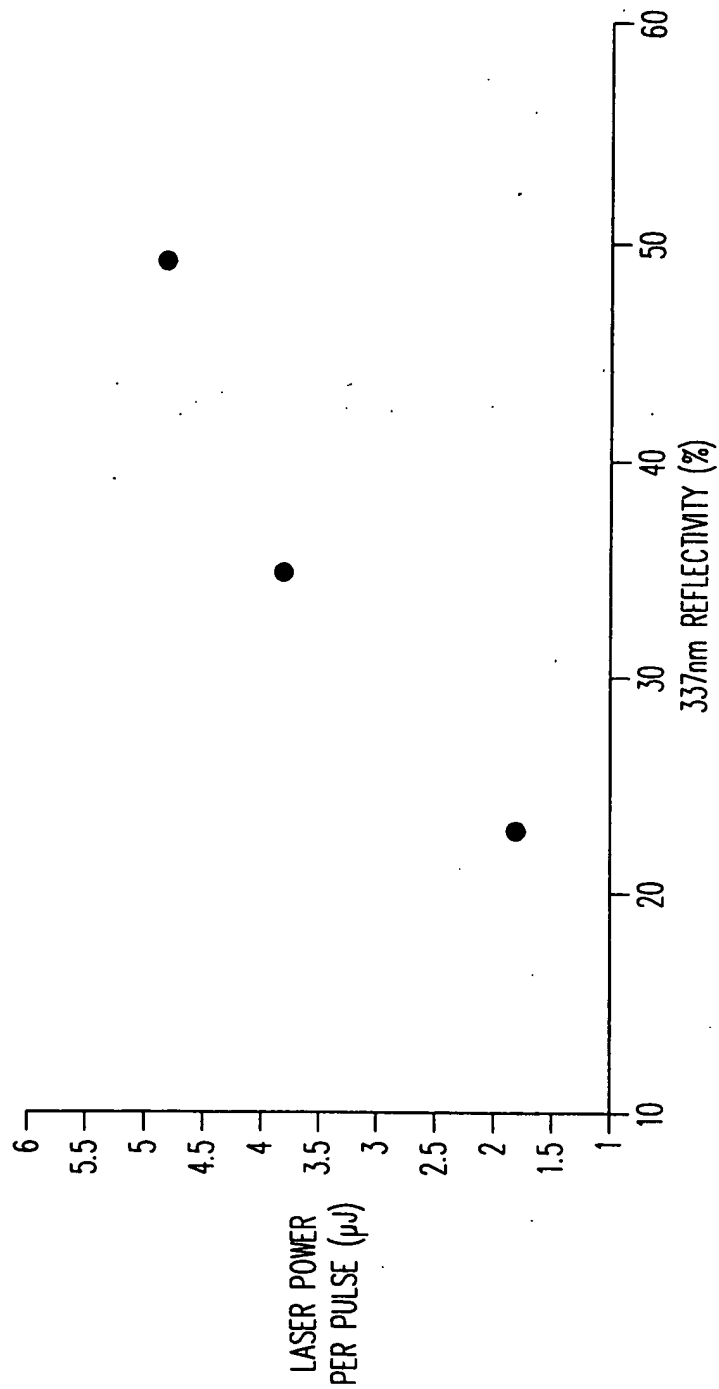


FIG. 11

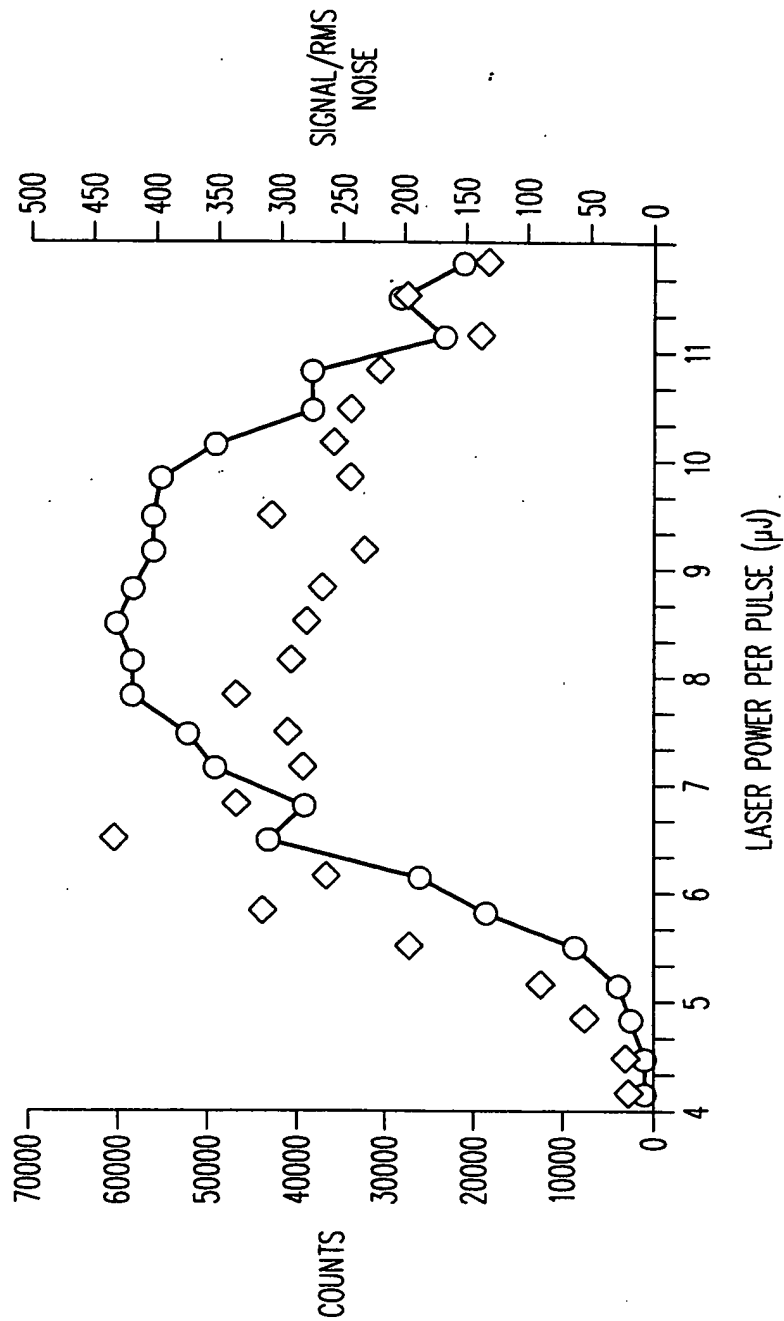
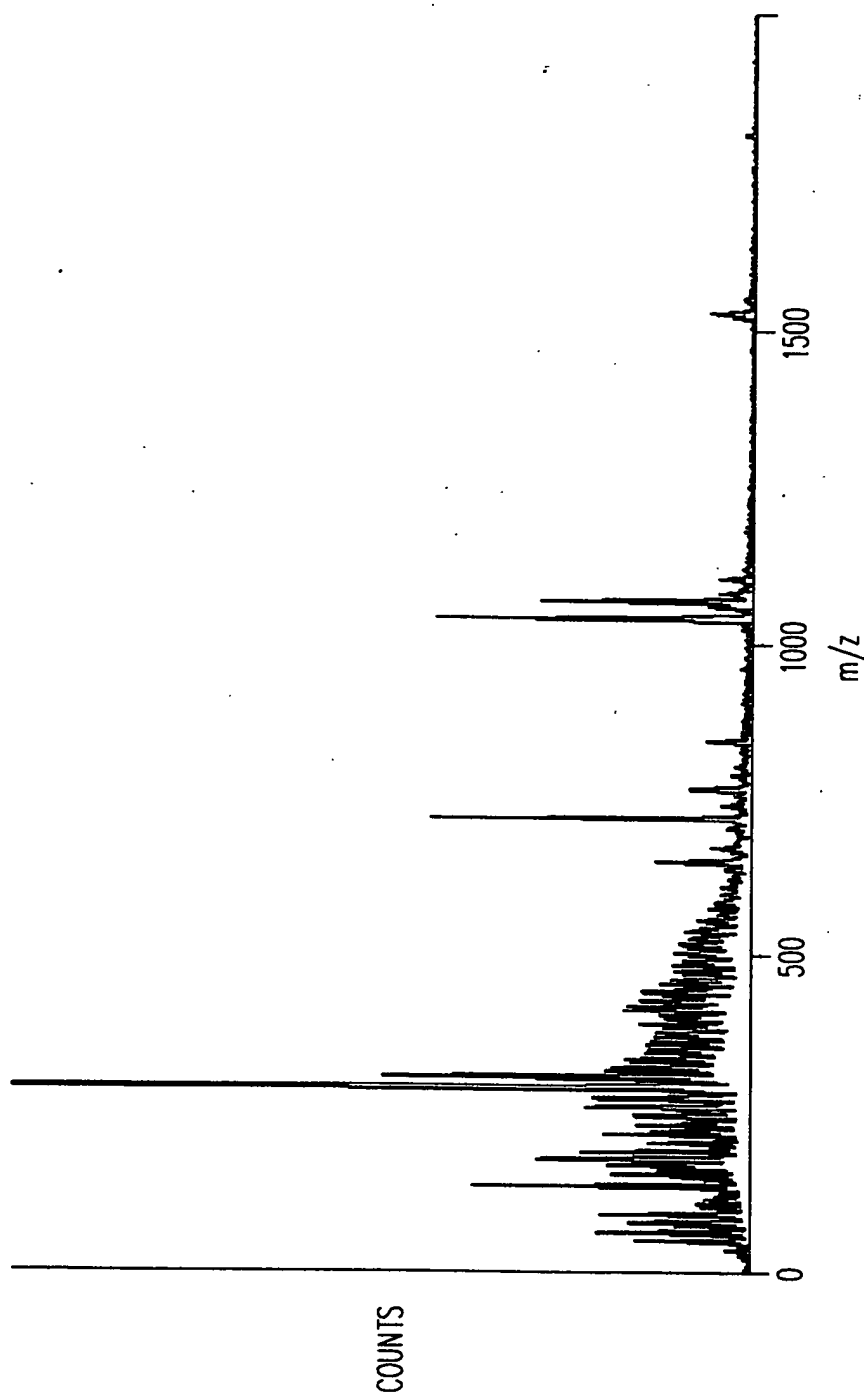
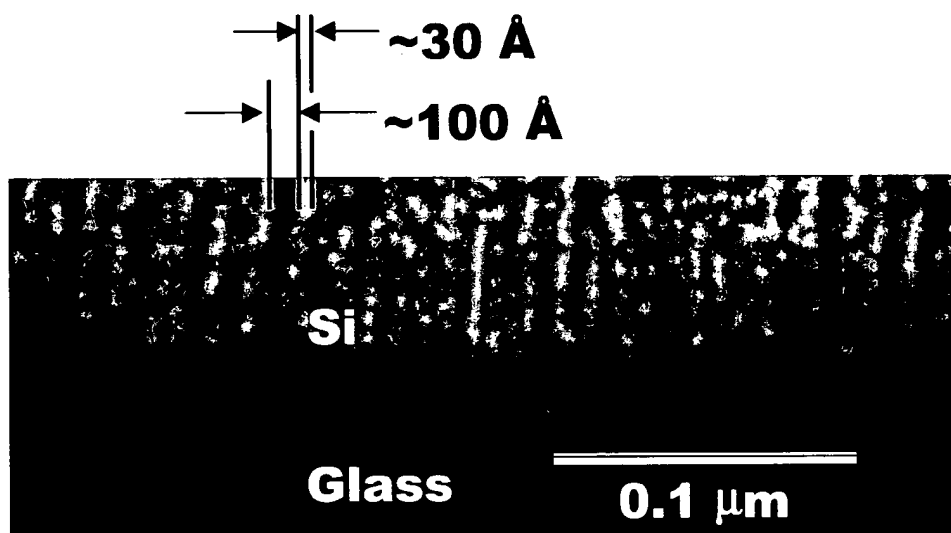


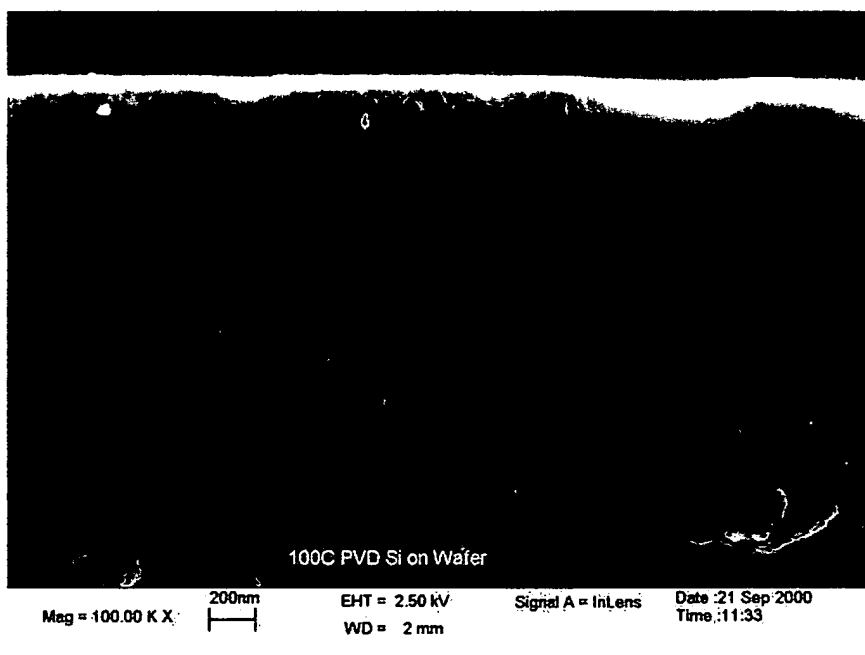
FIG. 12

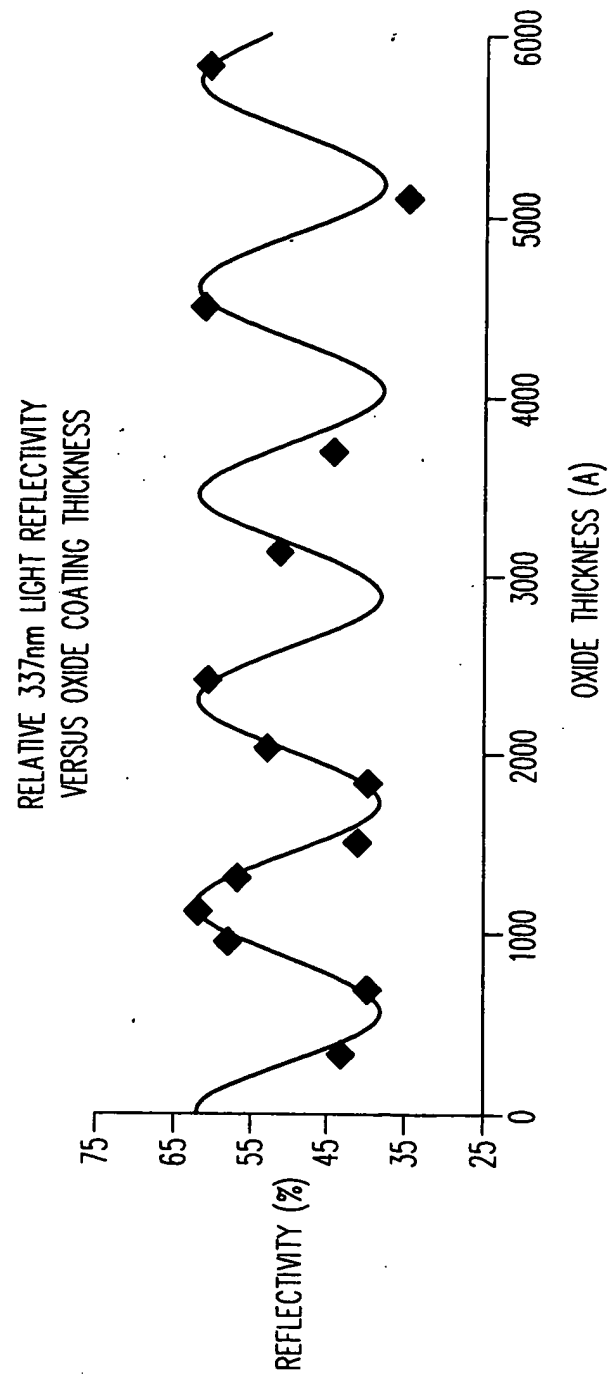
**FIG. 13**

DEPOSITION CONDITIONS

TEMPERATURE	120 °C
POWER	500 W
PRESSURE	7.8 mTorr

FIG. 14a

**FIG. 14b**

**FIG. 15**

RELATIVE MOLECULAR DETECTION COUNTS
VERSUS OXIDE COATING THICKNESS

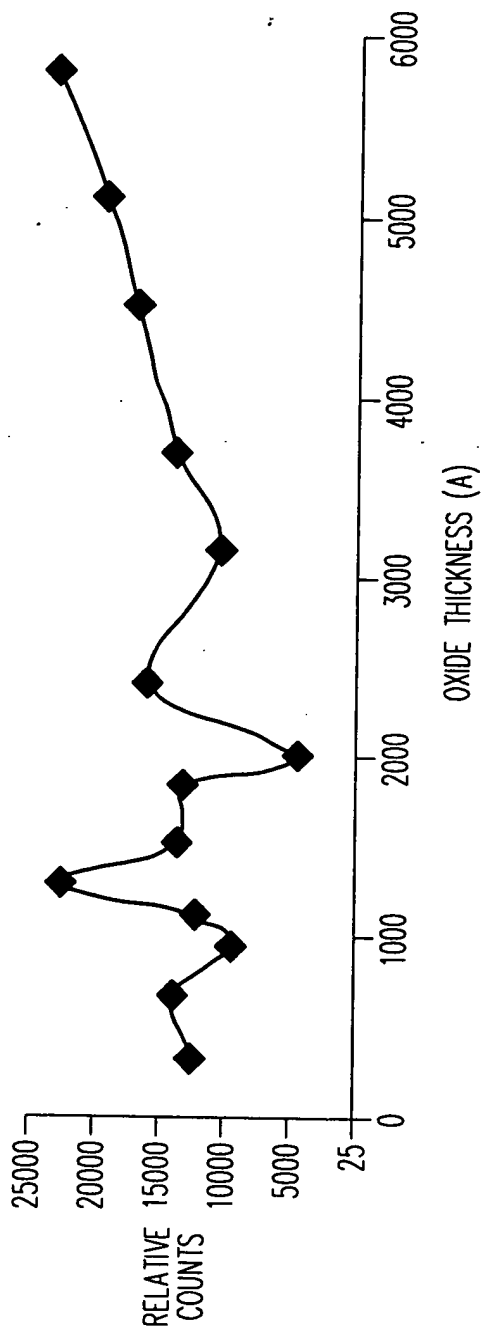


FIG. 16

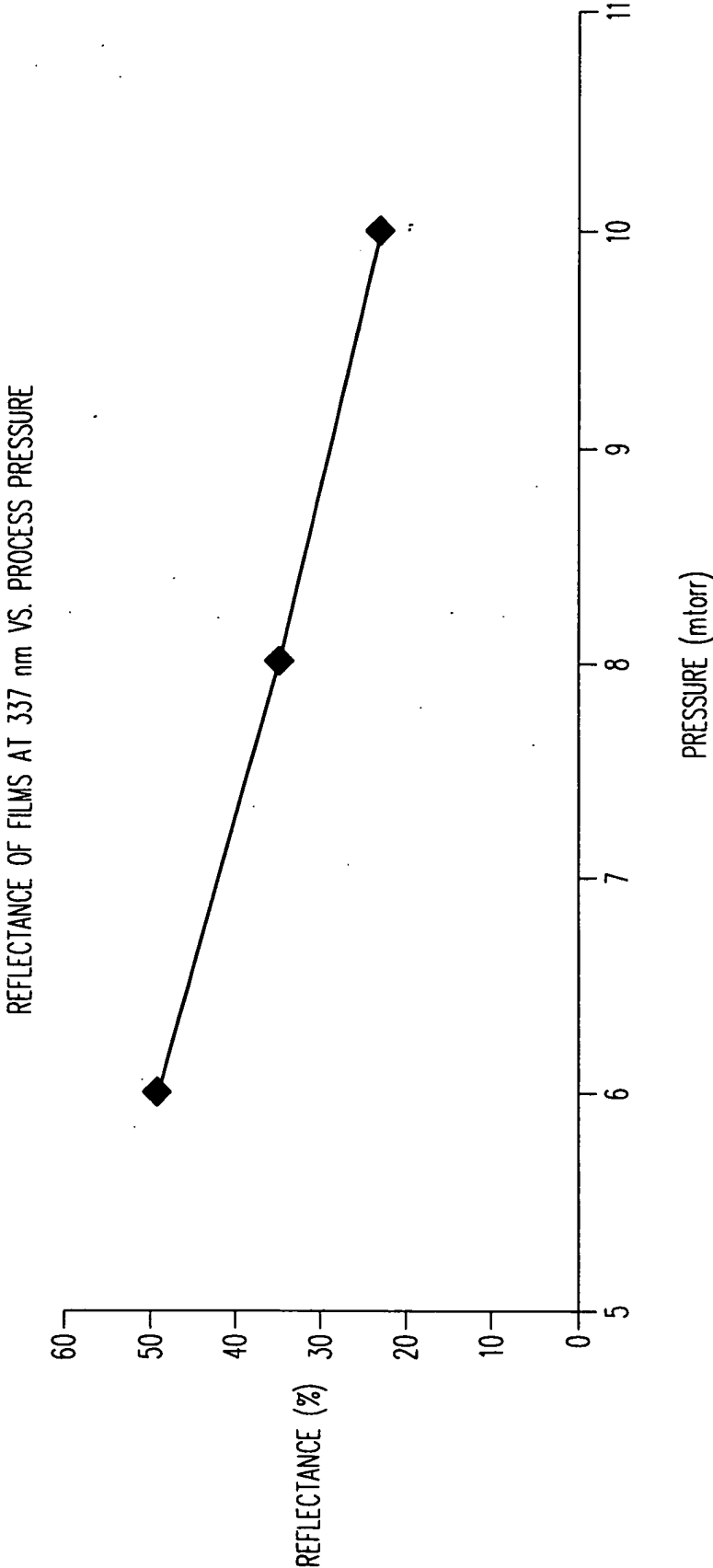
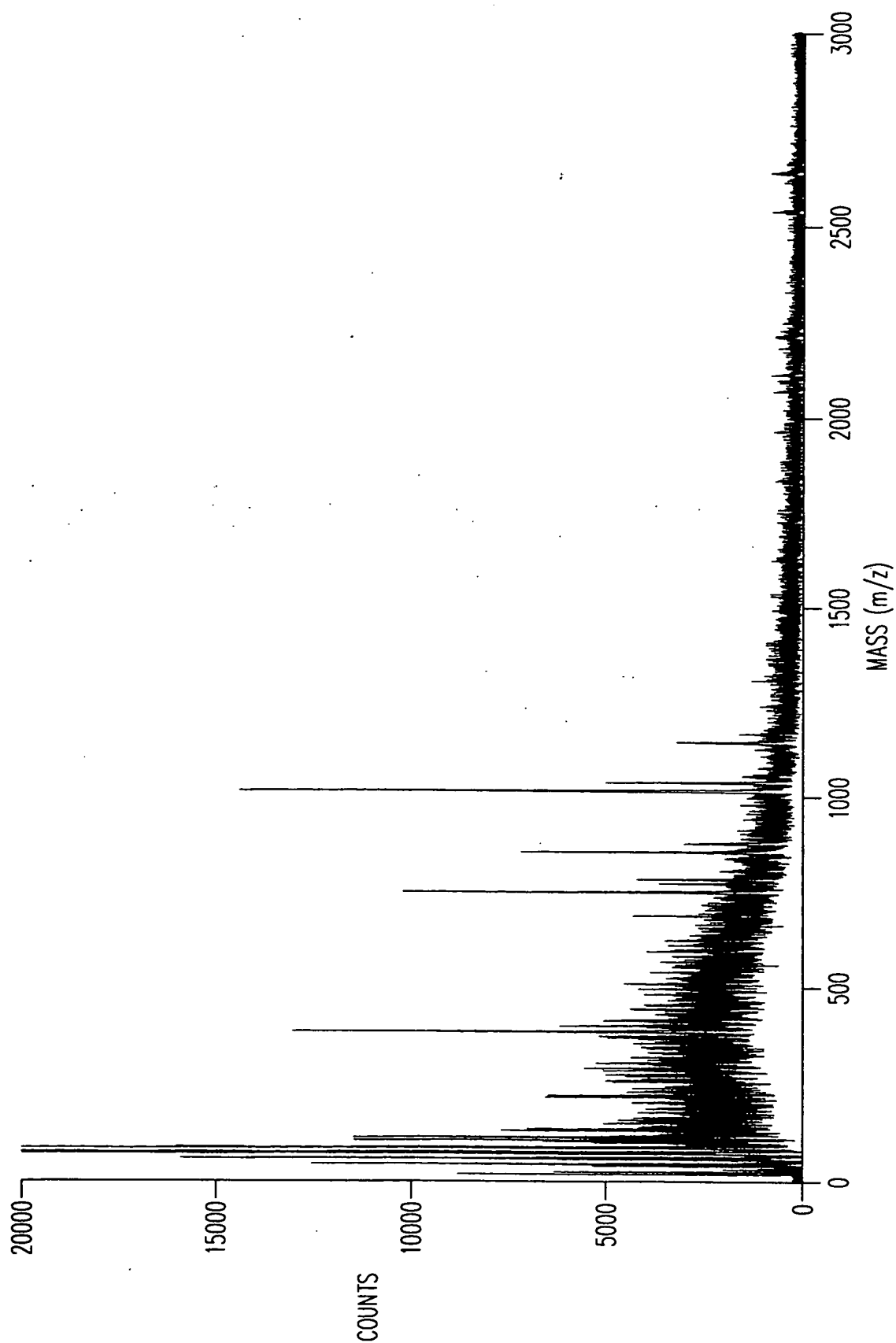
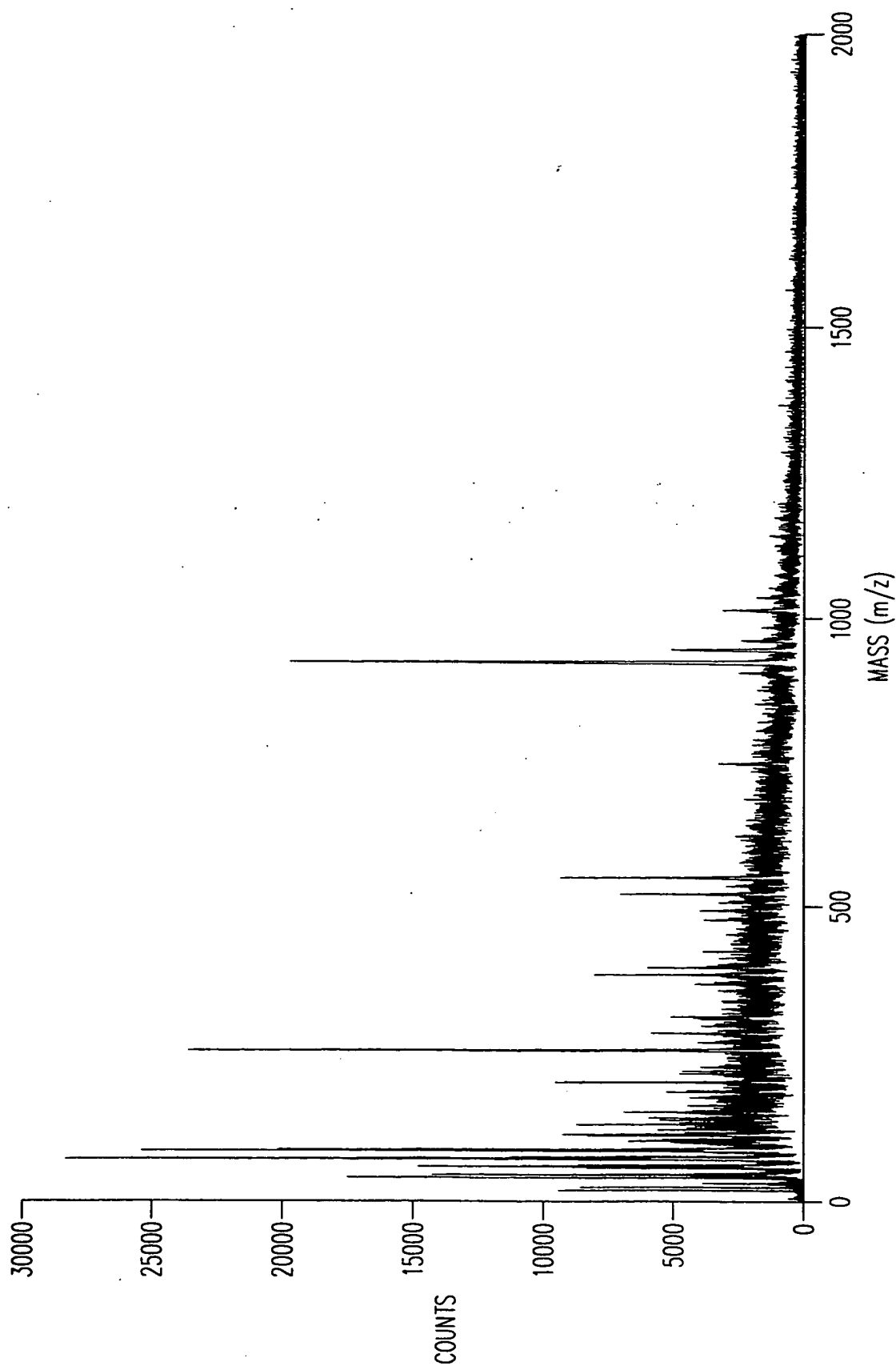
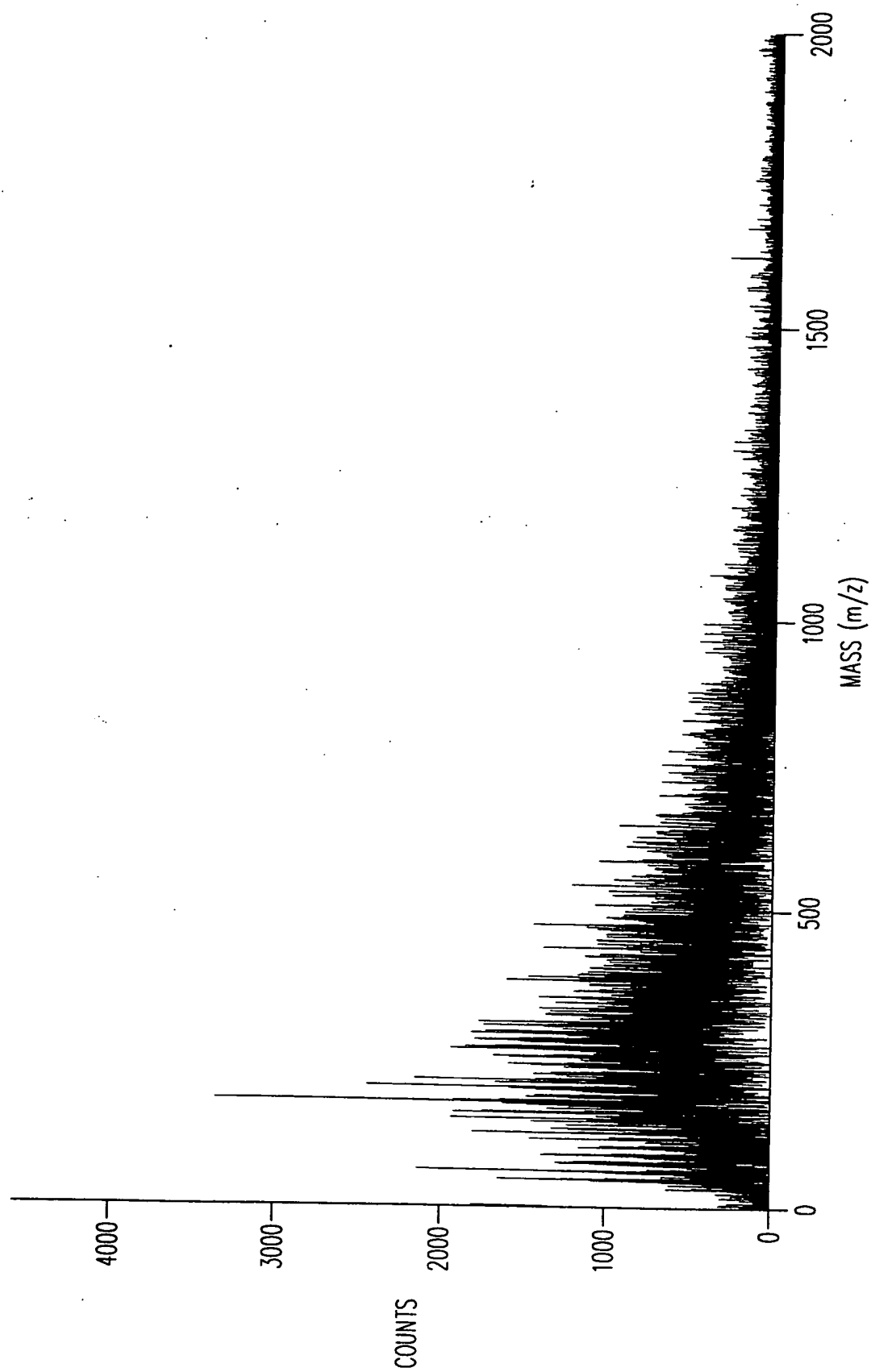
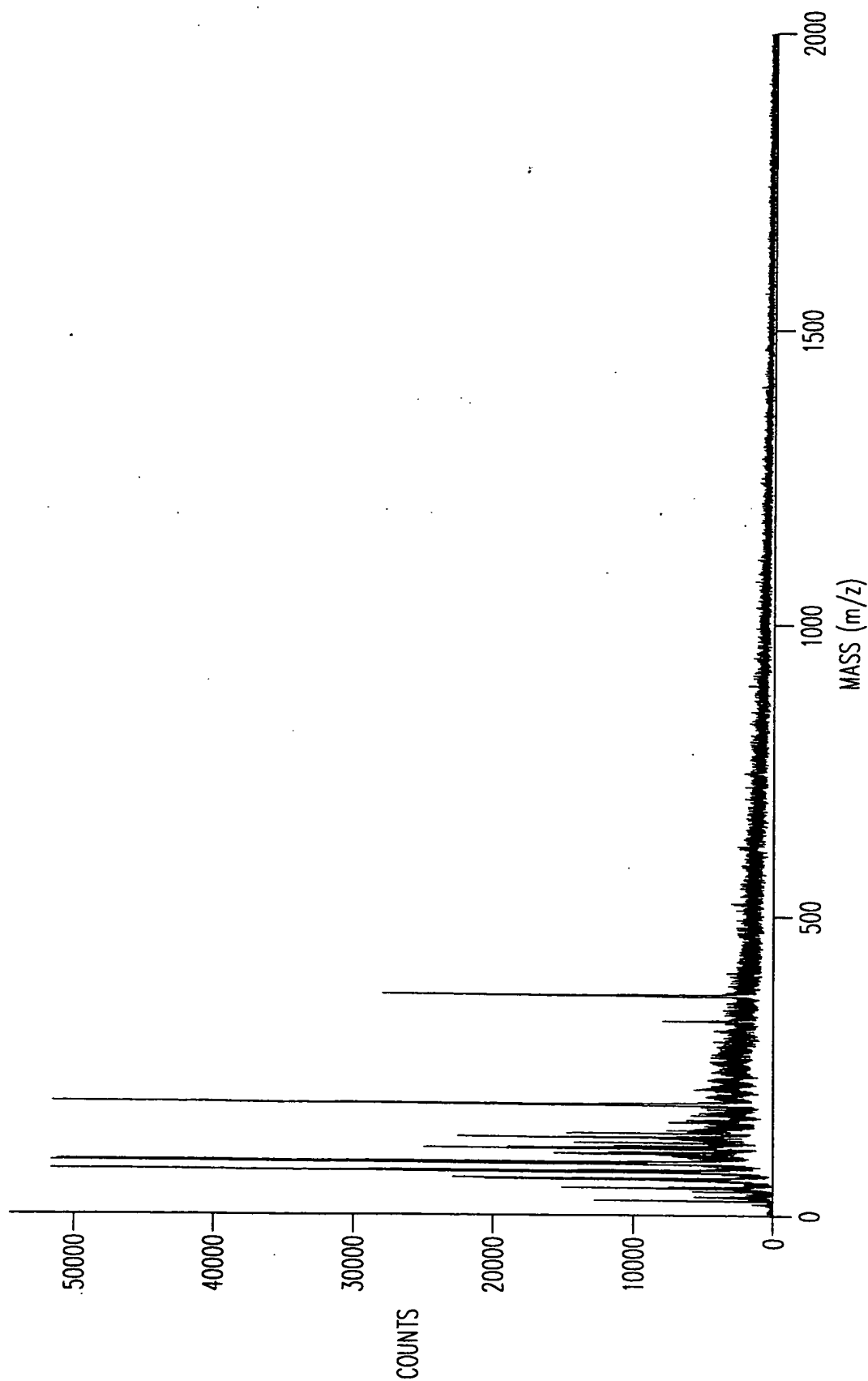


FIG. 17

**FIG. 18a**

**FIG. 18b**

**FIG. 19a**

**FIG. 19b**

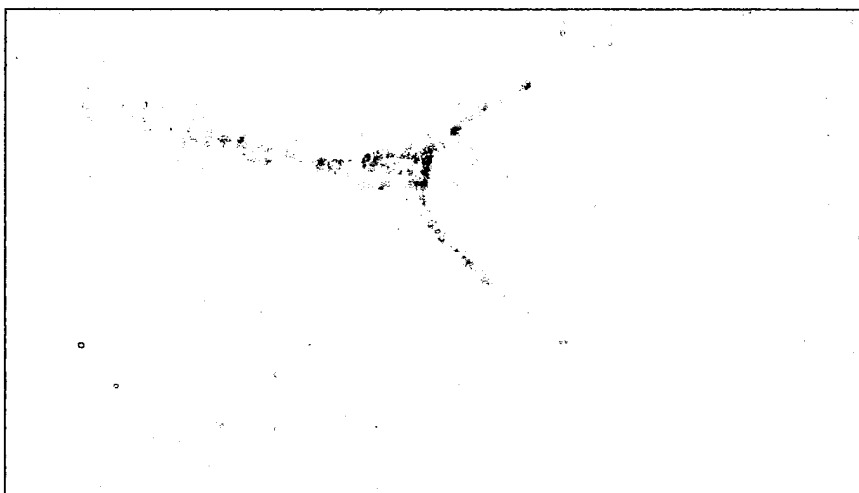


FIG. 20

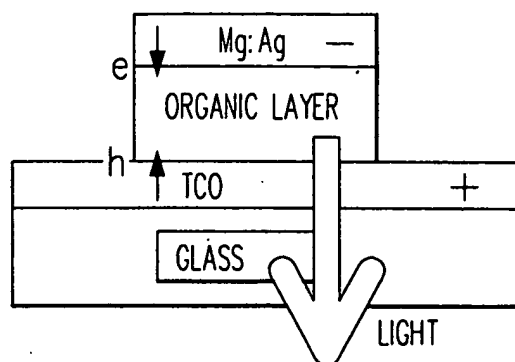


FIG. 21

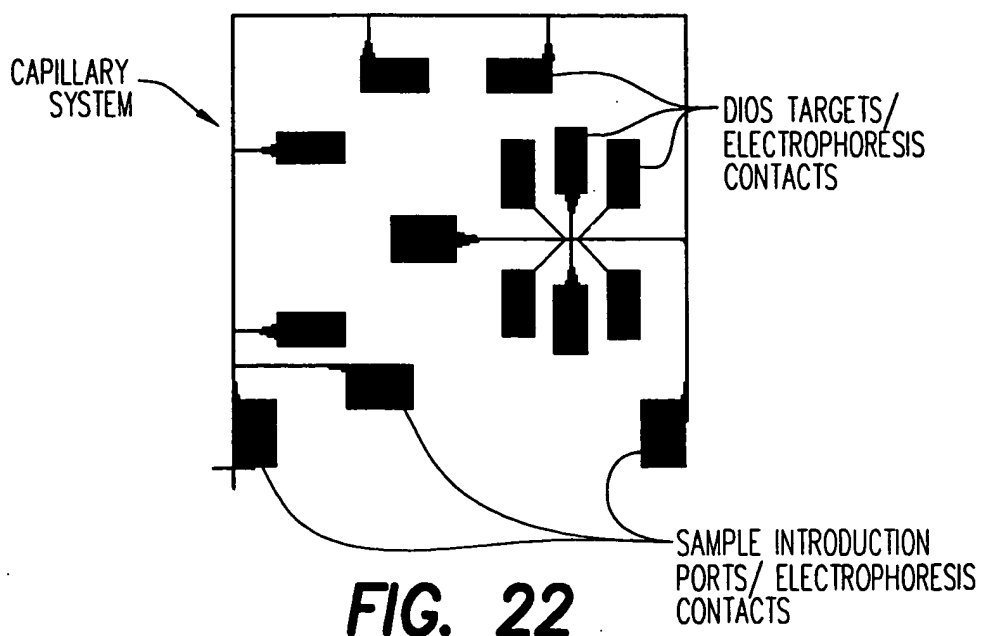


FIG. 22